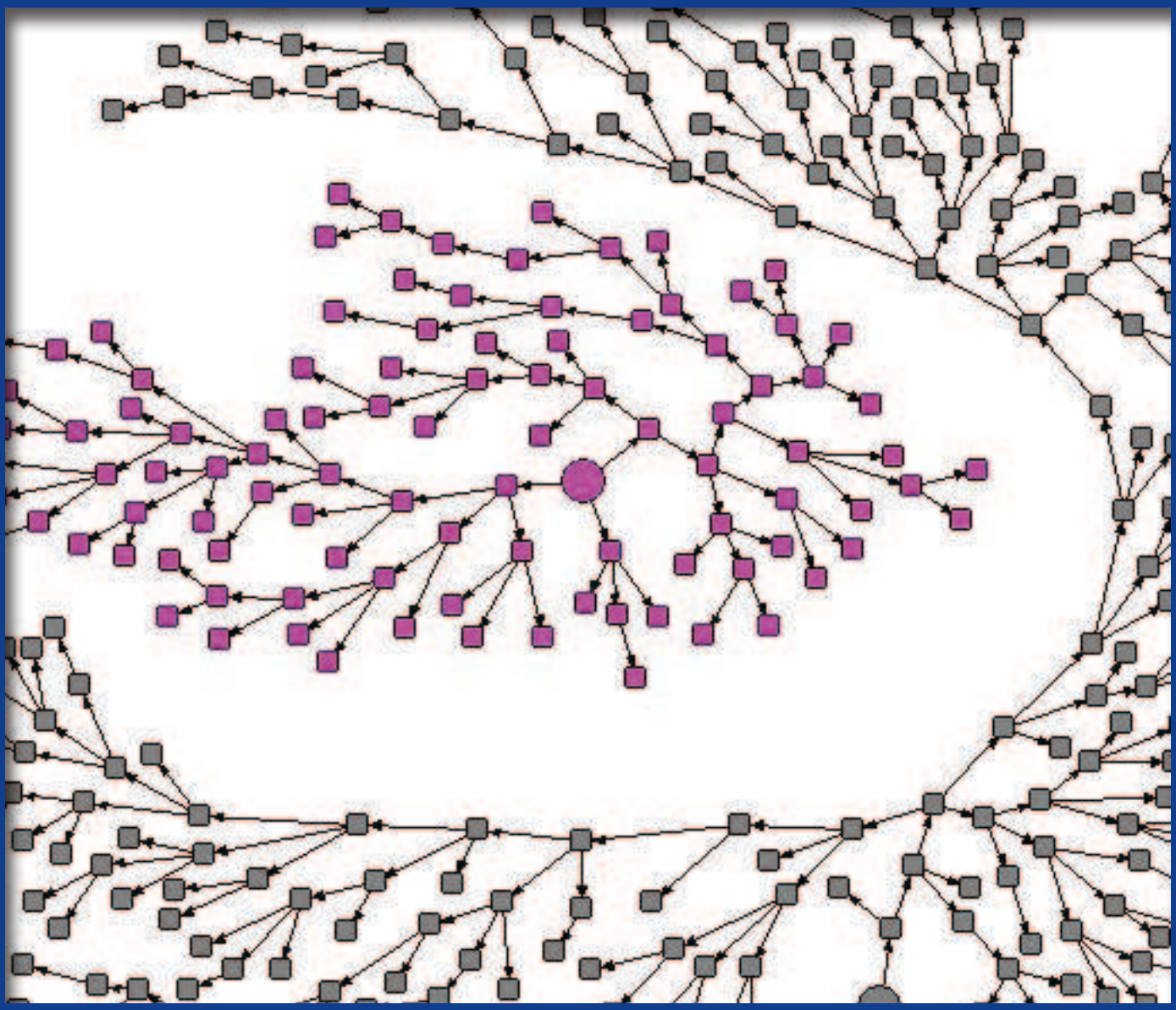
Health Service Utilization among Men Who Have Sex with Men and Transgender Women, San Salvador, El Salvador 2011–2012

RESULTS OF A CROSS SECTIONAL SURVEY USING RESPONDENT DRIVEN SAMPLING



MEASURE Evaluation
TECHNICAL REPORT

Health Service Utilization among Men Who Have Sex with Men and Transgender Women, San Salvador, El Salvador 2011–2012

RESULTS OF A CROSS SECTIONAL SURVEY USING RESPONDENT DRIVEN SAMPLING

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Executive Summary

INTRODUCTION

Men who have sex with men (MSM) and transgender women (TW) in El Salvador are disproportionately affected by HIV and other sexually transmitted infections (STI), and experience barriers to health services due to their social marginalization. In an effort to support HIV/STI programs, and programs aimed at improving the quality of life and wellbeing of MSM and TW, the United States Agency for International Development (USAID) supported a research study to provide descriptive information on health service utilization with a focus on HIV testing, and barriers to healthcare for MSM and TW.

METHODS

A structured survey was administered to a representative sample of 670 MSM and TW in San Salvador, El Salvador between November–February of 2012. Research participants were recruited using respondent driven sampling (RDS). The eligibility criteria included: being a man or TW 18 years of age or older, who had anal sex with a man or TW in the previous 12 months, and who had lived, studied or worked in the department of San Salvador for a minimum of three months prior to the interview. The interviews were facilitated by trained research staff using personal digital assistants (PDA) and were approximately 45–75 minutes in duration. Ethics approval was granted for this study from the Tulane University Biomedical IRB and the National Committee of Ethics and Clinical Investigation in El Salvador. Data analysis was conducted using RDSAT to facilitate appropriate weighting of the data.

RESULTS

Sociodemographic profile

- The majority of participants (69.7%) were between 18–24 years of age.
- More than half of the participants finished secondary school or had some university education. TW completed less formal education compared to MSM.
- The sample represents a poor population. A total of 27.8% had no monthly income, and 43.5% had an income less than US$250 per month.
- A total of 15.1% of participants reported sex work as their primary means of income generation. Almost half of TW (46.6%) reported sex work as their primary means of income generation, compared to 7.3% of MSM. More TW had a history of incarceration (24.9%) compared to MSM (12.5%).
- The majority of participants self-identified as men (81.5%), while 18.5% of the sample self-identified as TW. A high percentage of men self-identified as bisexual (52.0%), while a high percentage of TW self-identified as heterosexual (81.1%).
- One third of participants (35.0%) had never disclosed to anyone that they have sexual relations with men or TW.
- The level of sexual assault among participants was high (20.8% lifetime experience of sexual assault, 8.3% experienced sexual assault in the last 12 months).

Health service utilization

- One third of participants (30.2%) received healthcare services from a medical provider in the last 12 months.

Health insurance, regular provider, income

- Only one out of every four participants had health insurance (22.2%) or a regular healthcare provider (24.3%).
- The percentage who received healthcare from a medical provider in the past 12 months was greater for participants who had health insurance compared to those who did not (55.5% vs. 22.9%), and for participants who had a regular healthcare provider compared to those who did not (69.3% vs. 17.7%).
- Only 4.5% of participants who earned no monthly income received healthcare from a medical provider in the last 12 months. This percentage is significantly lower than participants who earned a monthly income (41.6% among participants whose income was US$249 or less, and 38.3% among those who earned US$250 or more per month).

Disclosure of sexual orientation

- Only half of the participants (52.9%) had disclosed to a family member that they form sexual relationships with men or TW.
- The percentage who received healthcare from a medical provider in the past 12 months was higher among participants who had revealed to a family member that they form sexual relationships with men or TW compared to participants who had not disclosed (44.2% vs. 14.7%).
- Similarly, a minority of participants (7.7%) revealed their sexual orientation to their healthcare provider.
- The percentage who received healthcare from a medical provider in the past 12 months was higher among participants who had disclosed to their sexual orientation to a healthcare provider compared to those who had not disclosed (74.6% compared to 26.7%).

Abuse and maltreatment

- One out of every five participants (21.6%) reported experiencing abuse or maltreatment because of their sexual orientation or gender identity in the last 12 months defined as hitting, punching, kicking, threats, scolding, or humiliations.
- The majority of participants (63.3%) who experienced abuse or maltreatment also received health services from a healthcare provider in the last 12 months. This percentage is significantly higher than participants who did not experience abuse or maltreatment (21.1%).

Perceived discrimination by a healthcare provider

- Approximately two thirds of participants (62.0%) reported experiencing discrimination from a healthcare provider due to their sexual orientation at least once in their life. TW were more likely to report having experienced discrimination from a healthcare provider than MSM.
- Examples of experienced discrimination from a healthcare provider included the perception of: being treated with less respect (55.4%); receiving poorer quality services (59.3%), being refused services (57.7%); and feeling the need to act more masculine or pretend that they were heterosexual when seeking health services (58.8%).
- The percentage of participants who received healthcare services in the last 12 months was lower for participants who reported a high level of perceived discrimination from a healthcare provider compared to participants with a low level of discrimination (20.6% compared to 37.2%).

Access to healthcare providers with characteristics that are supportive of MSM and TW

- Approximately half of the participants (48.9%) reported that they have access to a healthcare provider who demonstrates characteristics that are supportive of MSM and TW populations.
- The percentage of participants who received healthcare services in the past 12 months was higher for participants who reported access to a healthcare provider with characteristics of support for MSM and TW compared to participants without access to this type of provider (50.2% vs. 11.4%).
- Examples of a provider with characteristics supportive of MSM and TW include: one with whom the participant feels comfortable asking questions about sexual behavior (36.9%), and HIV/STI (36.8%), who maintains patient confidentiality (36.8%), who has sufficient knowledge about the health needs of MSM and TW (32.6%), who does not judge the participant negatively (35.6%), and who treats the participant with dignity and respect (38.8%).

HIV testing

- The vast majority of participants had taken a test for HIV at least once in their life (74.9%).
- More than half the participants had taken a test for HIV in the last 12 months (60.8%), and intended to test for HIV again in the next year (65.4%).
- Among participants who had not tested for HIV in the last 12 months, the most common reasons for not testing included: worry about confidentiality, a long waiting period to receive the test result, fear of judgment from the provider, fear of unintentional disclosure of sexual orientation, and fear of the test result.
- The majority of participants who had tested for HIV in the last 12 months accessed testing services through a national health fair or similar event.
- Participants who tested for HIV in the last 12 months reported a high level of quality of services.
- Only 67.7% received condoms when testing for HIV in the last 12 months.
- Participants who tested for HIV at least one in their life were more likely to: be 24 years of age or older; have had 16 or more lifetime sexual partners; to report a high level of perceived risk for HIV; be survivors of sexual assault; report that more than half of their social acquaintances had tested for HIV; to have disclosed their sexual orientation to a family member; and to know someone living with HIV. Among MSM, participants with a higher level of internalized homonegativity[1] were more likely to have ever tested for HIV.
- Participants who tested for HIV in the last 12 months were more likely to: be 24 years of age or older; be survivors of sexual assault; and to have disclosed their sexual orientation to a family member.
- There was no difference among participants who had tested for HIV ever or in the past 12 months and those who had not in relation to sexual orientation and identity, nor sexual risk behavior for HIV.

Preferences for health services

- A total of 64.4% of participants preferred a general practitioner.
- A total of 33.8% of participants preferred a specialist. Among TW, the preferred types of specialist were proctologists, endocrinologists, and gynecologists. Among MSM, the preferred types of specialists were urologists, proctologists, and infectious disease specialists.
- A large percentage of participants reported a preference for a private medical provider (45.6%) or a MINSAL hospital or clinic (42.0%).

[1] Internalized homonegativity is a psychosocial construct that refers to the phenomenon of self-hate and shame internalized by MSM due to their beliefs about their sexual orientation.

Preferences for MSM/TW "friendly" services

- One third of participants preferred a healthcare provider who is also a sexual minority (33.0%).
- The majority of participants stated a preference for healthcare providers (76.2%) and healthcare facilities (78.2%) that focus on the health needs of MSM and TW.
- The primary reason for this preference was increased technical skill of providers in addressing the health needs of MSM and TW (38.6%). The second most common reason for this preference was increased trust in this type of provider or facility (31.2%)
- Among the minority of participants who did not prefer MSM/TW "friendly" services, the primary reason was the fear that this type of service provision would inadvertently lead to the disclosure of their sexual orientation (53.9%). The second most common reason was that they did not feel it was necessary (37.4%).

RECOMMENDATIONS

- Social norms that discriminate against MSM and TW serve as barriers to health service utilization for these populations, and should be addressed within the health system as well as the wider community. These efforts should include increased integration of sexual health and reproductive services for these populations, and a focus on human rights and respect for sexual diversity. In this study, factors related to discriminatory social norms that served as barriers to health service utilization include: non-disclosure of sexual orientation, the experience of discrimination from healthcare providers, and limited access to providers with characteristics supportive of MSM and TW populations.
- There should be increased support to aid MSM and TW in the process of disclosure of their sexual orientation and gender identity. Healthcare providers may play an important role in interventions to support disclosure, along with civil society groups and NGOs. This should also supported through strategies to promote institutional advocacy for the respect for the rights of MSM and TW and quality care within the health service system. Efforts should also be made to support self-esteem among MSM and TW persons.
- Interventions to increase HIV testing among MSM and TW should focus on self-acceptance within these populations. Healthcare providers, civil society groups, and NGOs should support these types of programs that may take the form of individual and group counseling.
- The creation of specific services directed towards MSM and TW populations alone is not sufficient to address health service utilization barriers for MSM and TW. These services need to be complemented by changes throughout the healthcare system including interventions for all types of service providers to increase their knowledge and skills related to health needs of MSM and TW and to ensure respectful and appropriate treatment of these populations.
- It is important to address the underlying causes of social and economic vulnerability of MSM and TW in order to increase health service utilization, decrease sex work, and reduce vulnerability to HIV and STIs for these populations. Ability to address these challenges requires support from within MSM and TW communities themselves, as well as changes at the community and structural levels.
- The majority of participants in this study used HIV testing services. However, it is important that these services are more appropriately targeted so that MSM and TW at highest risk for HIV infection are reached.
- Social networks were an important influence on the decision to test for HIV among MSM and TW. Use of social networks strategies to recruit MSM and TW for HIV testing may increase the use of these services. It is also important to support the integration of local health service networks including sexual and reproductive health services and HIV services.

Chapter 1 Introduction

Ensuring access to health services, particularly services related to HIV/STI, for men who have sex with men (MSM) and inclusive groups (gay, homosexual, or bisexual men) and transgender women (TW), is an important goal in El Salvador and the Central America region for both public health and human rights reasons. These populations are disproportionately affected by HIV/AIDS, with an estimated 10% of MSM and 26% of TW infected with HIV in El Salvador [1]. While it is clear that HIV/STI are critical health issues for these populations, little is known about other health needs and preferences for health services in this context. At the same time, there is evidence from other contexts, that MSM and TW may suffer disproportionately from certain health conditions due to their experience of social marginalization including depression, substance use and post-traumatic stress syndrome (PTSD) [2].

In keeping with UNAIDS recommendations for increasing universal access to essential services for MSM and transgender people [3], recent research and programmatic efforts in the Central American region have focused on reducing stigma and discrimination among providers of health services. This includes qualitative and quantitative studies among health service providers and the development of a process and measure to certify service sites as non-discriminating [4, 5]. This information represents the perspective of healthcare providers, and the health system, but does not adequately present the perspective of the potential client. Therefore, the overall goal of this study was to describe current use of health services among MSM and TW, quality of services received, and determinants of health service utilization and HIV testing from the perspective of MSM and TW themselves.

Provision of comprehensive and quality healthcare for MSM and TW requires an understanding of how the reality of social exclusion and marginalization endured by this population affects their need and desire for health services, their perception of available services, and their experience seeking them. As noted in a recent regional meeting of experts on this topic, *"The psychosocial impact of daily exclusion must be the gateway to understanding barriers that affect delivery of and access to care and support for MSM communities. (p.5) [6]."* Therefore, this study investigated modifiable variables along the care continuum including both demand and supply side factors on health service utilization. The specific research objectives are described below.

1.1 RESEARCH OBJECTIVES AMONG MSM AND TW

- To describe patterns health service utilization during the last year including general health and HIV/STI services.
- To identify preferred mechanisms for delivery of health services including type of provider (public/private/MSM specific), location, and hours of operation.
- To identify factors in the social environment related to gender identity and orientation that may influence health service utilization.
- To determine the extent of experienced discrimination from healthcare providers and the relationship to health service utilization.

To address these objectives, a cross sectional survey was implemented among MSM and TW. This report presents the findings of the survey, and relevant policy and programmatic implications for El Salvador.

Chapter 2 Study Design and Methods

2.1 ELIGIBILITY CRITERIA

MSM and TW who live, work, or study in San Salvador, El Salvador comprised the study population. Respondents had to meet the following eligibility criteria to enroll in the study:

- 18 years of age or older.
- A man or TW who had anal sex (receptive or penetrative) with another man or TW in the last 12 months.
- Had lived, worked, or studied in San Salvador for at least 3 months prior to the interview.
- In possession of an RDS coupon given to them by someone they know who participated in the study (exception for seeds).

2.2 RECRUITMENT METHOD

This study employed respondent driven sampling (RDS) to recruit research participants. RDS is a chain-referral sampling technique commonly used to recruit stigmatized or "hard to reach" populations, including MSM [7–9]. When implemented and analyzed properly, RDS data is representative of the social network from which the sample is collected. RDS analysis utilizes statistical adjustments to account for differential network sizes and recruitment patterns, mitigating the non-random recruitment of the initial respondents. According to a systematic review of RDS in international settings, since 2003 over 120 studies utilizing RDS have been conducted in 28 countries [10]. The sampling technique has been used successfully in Central America and Mexico to recruit MSM and generate representative data, including among MSM in Guatemala [11], El Salvador [1, 12], and Nicaragua [12, 13].

A key assumption of RDS is that members of the "hidden" populations themselves can most efficiently identify and encourage participation from within their social network. Recruitment begins with the purposeful selection of members of the study population, referred to as "seeds." Each seed is surveyed and given a fixed quantity of uniquely numbered coupons to recruit other eligible peers into the study (no more than three). These recruits comprise "wave 1" of the recruitment chain. The recruits of "wave 1" respondents are considered "wave 2" of the recruitment chain, and so on. To meet a key assumption of RDS, the sample should consists of long recruitment chains in order to achieve equilibrium, or the point at which the sample characteristics no longer significantly change regardless of the number of additional people recruited into the study [14].

2.3 SAMPLE SIZE

The sample size for this study is 670 participants, including 5 seeds. This number of respondents allows for the detection of a 15% absolute difference in a given exposure variable between participants who tested for HIV in the last 12 months compared to

those who did not. HIV testing, a key element of essential service utilization, served as the basis for the sample size calculation. The base rate of HIV testing was estimated to be 60% based on 2007 and 2009 surveillance surveys conducted among MSM in the region [11, 12]. As a conservative estimate, a 1:1 ratio of the exposure variable was assumed. The following sample size formula was used for this study[15]:

$$n = D\left\{ z_{1-\alpha/2}\sqrt{2p'(1-p')} + z_{1-\beta}\sqrt{p_1(1-p_1)+p_2(1-p_2)} \right\}^2 / (p_1 - p_2)^2$$

D = design effect
p_1 and p_2 = the estimated proportions
p' = the average of p_1 and p_2
n = the sample size for each group

A design effect of 2 was estimated to account for the use of RDS [16]. Further, the sample was increased to allow for a 10% non-response rate. Alpha (type I error) was set to 5% (two-tailed alpha = 95%) and power at 80% for the sample size calculation.

2.4 DATA COLLECTION PROCEDURES

Table 1 Seed characteristics

Seed	Gender identity	Sexual orientation	Age
1	Male	Gay/Homosexual	29
2	Male	Bisexual	21
3	TW	Bisexual	32
4	Male	Bisexual	31
5	Male	Gay/Homosexual	27

Seed selection began with the identification of nine potential seeds by key civil society organizations in San Salvador, of which five were ultimately selected as seeds. Four seeds self-identified as men and one self-identified as a TW. In terms of sexual orientation, two seeds were gay/homosexual and three were bisexual. The seeds' ages ranged from 21 to 32 years old.

The five seeds were invited to the study site for their interviews. The study site was centrally located, easily accessible to participants by several bus lines, and near a large commercial shopping venue. The site consisted of waiting room, three private interview rooms and an area for coupon and incentive management. The seeds completed a face-to-face interview in Spanish conducted by trained interviewers. Survey questions were administered to participants by interviewers in private rooms at the study site.

Box 1 Recruitment procedures

1. Respondent presents study staff with a valid referral coupon and is screened for eligibility
2. Eligible respondents consent to participate in the study
3. Respondent completes face-to-face interview
4. Coupon manager explains the recruitment process to the respondent and provides him with up to 3 uniquely numbered coupons
5. Respondent receives primary incentive for completing questionnaire
6. Respondent leaves study site
7. Respondent returns to study site for secondary incentives for successful recruitment

The interview team was diverse and included MSM, a heterosexual woman, and a TW so that participants could be matched with interviewers that would increase their level of comfort. All interviewers had prior experience administering surveys with similar sensitive questions related to sexual behavior and HIV/STI. The research coordinator remained on-site throughout all data collection, and provided supervision to the study staff including the coupon distribution system, the informed consent process, maintenance of confidentiality, and building of rapport with participants.

Data were collected with handheld devices and uploaded regularly to a central computer to minimize manual data entry errors. Interviews were approximately 45 to 75 minutes in duration. Upon completion of their interview, participants received up to three uniquely numbered recruitment coupons to distribute to peers meeting the eligibility criteria. Participants received a primary incentive of US$5 for completing the interview. For each peer who presented a valid referral coupon, met the eligibility criteria, and enrolled in the study, the recruiting respondent received an additional US$3 in secondary incentive. Participants could recruit up to three peers for a maximum secondary incentive of US$9. This process continued until the sample size was reached. (Box 1.)

2.5 DATA ANALYSIS

Data cleaning was conducted in SAS/STAT® software. Variables were created and recoded in STATA SE version 12.0 (Statacorp, 2011). The Respondent Driven Sampling Analysis Tool 6.01 (RDSAT) was used to calculate the proportion estimates and 90% and 95% confidence intervals for variables of interest. This software package was specifically developed to analyze data collected through RDS: www.respondentdrivensampling.org. RDSAT adjusts for biases associated with chain referral sampling. The software's multiplicity estimator was used to weight the data for participants' network sizes and to control for differential recruitment patterns [17]. Proportion estimates and 90% and 95% confidence intervals for variables with over one third of the sample missing (primarily because of skip patterns) were calculated using the "estimate prevalence" function.

Bivariate analysis was also conducted using RDSAT's estimate prevalence function [17]. RDSAT is not able to calculate Pearson $\chi 2$ or other tests of association. To determine statistically significant associations between categorical variables, the RDSAT-adjusted 90% and 95% confidence intervals were compared. Confidence intervals that did not overlap were considered to be statistically significant. Medians and means were calculated in STATA using the unadjusted data.

Multivariate logistic regression was conducted in STATA SE version 12.0. Individualized weights were exported from RDSAT 6.01 and applied to the outcome measures (e.g. health service utilization and HIV testing) during the analysis. The independent variables included in the logistic regression models were not weighted.

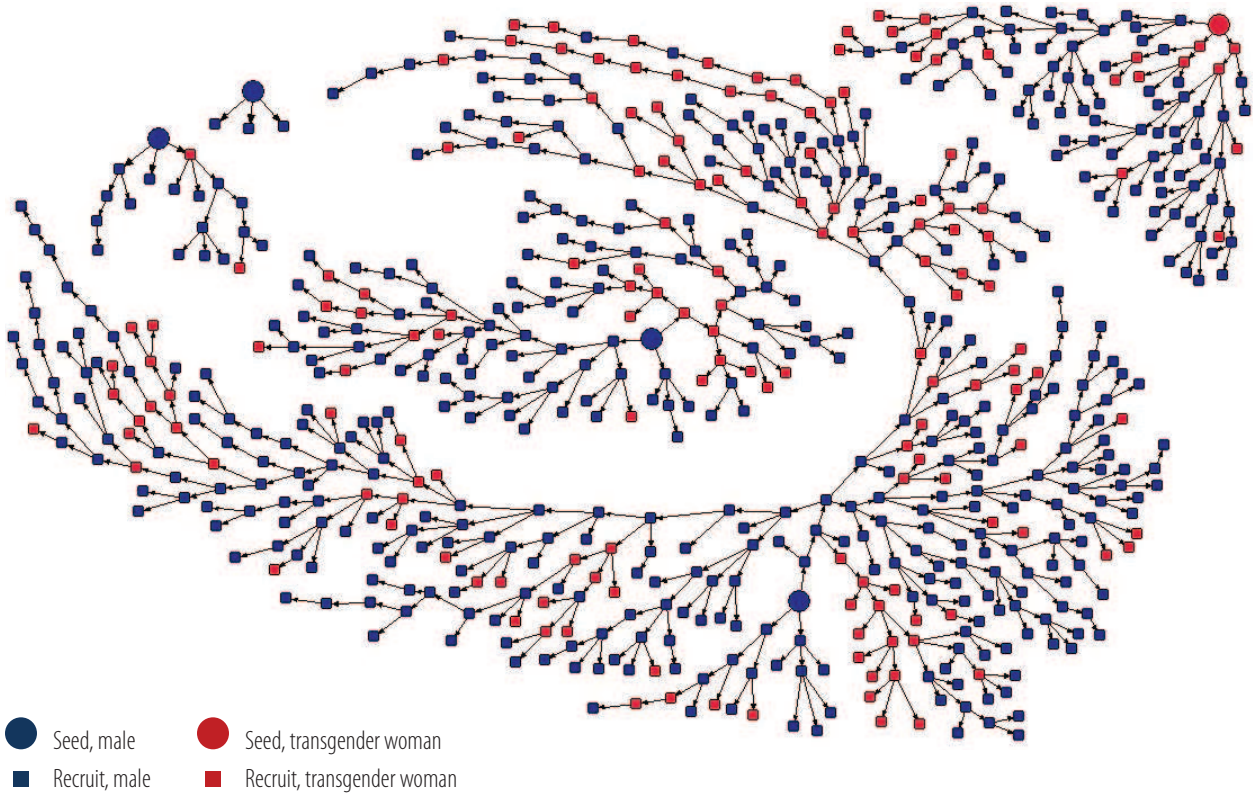
2.6 HUMAN SUBJECTS APPROVAL AND ETHICAL CONSIDERATIONS

This study received human subjects approval from both Tulane University (November 3, 2011) and El Salvador's Comité Nacional de Investigación Clínica (September 20, 2011). Participation in the study was voluntary and all respondents provided informed consent prior to enrolling.

2.7 RECRUITMENT RESULTS

Data collection ran from November 2011 to February 2012. The survey reached a final sample size of 670. All seeds actively recruited additional participants, resulting in five separate recruitment chains (Figure 1).

Figure 1 : Recruitment graphic of sample (N = 670), San Salvador, El Salvador 2011–2012



The recruitment chain emanating from seed four was most successful. This chain represented 65% (n = 437 respondents) of the entire sample and reached 24 waves. Seed one recruited only three participants, producing one wave and comprising the smallest proportion of the sample (0.60%).

Table 2 Seed recruitment and chain development

Seed	Maximum recruits†	Maximum waves†	Percentage of sample
1	3	1	0.60
2	18	5	2.83
3	96	10	14.48
4	437	24	65.37
5	111	11	16.72

† Seeds not included

In Table 3, information on the average network size, homophily, and number of waves needed to reach equilibrium is presented. For gender identity, the average network size was 6.07 for MSM and 8.26 for TW. MSM had a homophily score of 0.08 indicating they were equally likely to recruit MSM or TW into the study. TW were slightly more likely to recruit other TW than MSM into the study with a homophily score of 0.32. Participants who used health services in the past 12 months had an average network size of 7.86, while those who did not had an average network size of 5.88. For both

users and nonusers of health services the homophily score was relatively close to zero (0.14 and –0.07 respectively), indicating an equal propensity to recruit others similar or different to themselves based on this characteristic. Finally, the average network size for participants who had ever tested for HIV was 6.88, and was 5.29 for participants who had never tested for HIV. Homophily scores were also close to zero for this variable (0.22 for ever testers and –0.07 for never testers) indicating a relatively equal propensity in both groups of recruiters to recruit others similar or different from them based on this characteristic. The number of recruitment waves needed to reach equilibrium for all variables presented was 2, and this requirement was far surpassed by 4 recruitment chains (Table 2). Overall, these data indicate that the assumptions needed for RDS analysis have been met.

Table 3 Average network size, homophily, and equilibrium for key variables

Variable	Average network size†	Homophily◊	Number of waves required to reach equilibrium
Gender identity	—	—	2
• MSM	6.07	0.08	—
• TW	8.26	0.32	—
Health service utilization in the last 12 months			2
• Used services	7.86	0.14	—
• Did not use services	5.88	–0.07	—
HIV testing ever			2
• Ever tested for HIV	6.88	0.22	—
• Never tested for HIV	5.29	–0.07	—

† Adjusted network size based on multiplicity estimator in RDSAT
◊ Standard homophily

2.8 INTERNALIZED HOMONEGATIVITY INDEX

In this study, we included a measure of internalized homonegativity because of the importance of this construct in understanding the life experiences of MSM and health seeking behavior.[2] Internalized homonegativity is a psychosocial construct that refers to the phenomenon of self-hate or shame that may occur among MSM as a result of their own beliefs about their sexual orientation. These beliefs are shaped by the social environment, but ultimately reside within the individual. As part of an individual's consciousness, internalized homonegativity may have detrimental effects on perceptions of the self, including self-esteem, and may also influence health seeking behavior due to a lower perception of self-worth. This form of stigma has also been referred to as "felt" or "internal" stigma[18], and is different from "external" stigma [19], which refers to perceptions of what others in the community think about male homosexuality.

[2] Additional psychosocial constructs measured include social support and male role attitudes. These psychosocial constructs were also selected based on their potential influence on the life experiences and health service utilization among MSM and TW. These variables were not statistically significantly associated with either key outcome variable: health service utilization or HIV testing. Details about these measures and internalized homonegativity including items frequencies, and the score for the construct are included as supplementary analysis in the appendix.

Measures of internalized homonegativity have been developed specifically to capture the experience of homosexual men, and do not adequately account for the unique life experiences of TW. In the current study, Mayfield's 23-item Internalized Homonegativity Index (IHI) was used to measure the construct, using a 4-point Likert response scale ranging from "strongly disagree" (lowest score 1) to "strongly agree" (highest score 4) [20].

In this study, Cronbach's alpha was 0.90 for the IHI, indicating high internal consistency of the measure. The possible score range for the measure is 23–92. In this study, the median score among participants was 50 (range 23–83). A higher score indicates higher internalized homonegativity. However, there is no set cut-off for high versus low internalized homonegativity. Rather, this score allows for the relative comparison of participants within the sample. In subsequent analysis presented in this report, the variable of internalized homonegativity is presented as a categorical variable using "high" and 'low" categories based on a median split.

Chapter 3 Socio-demographic Characteristics and Key Features of the Study Population

3.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS

In this chapter, socio-demographic characteristics and other key features of the study population are described. This includes measures of gender identity, sexual orientation, disclosure of gender identity and orientation, mobility, self-rated health status, and violence. Results are presented for the total sample and for MSM and TW separately where possible. Comparisons across MSM and TW groups are noted in the text only in cases of statistically significant differences in point estimates based on 90% and 95% confidence intervals.[3]

In Table 4, socio-demographic characteristics are presented. The median number of social network members meeting eligibility criteria was 10 (range 1 to 350). Overall, the sample population was young. Ages ranged from 18 to 65, with a median age of 22 years for the total sample. Just over two thirds of participants (69.7%) were between 18 and 24 years old. The majority of the population reported completing high school or at least some university-level education (26.1% and 33.3% respectively). Nearly one third of participants (31.4%) reported some secondary education. Less than one tenth (9.2%) of the population had no formal education or primary school education only. A larger proportion of TW reported no formal education or primary education only (17.1%), compared to MSM (7.1%). Only 20.2% of TW reported some university or complete university education compared to 36.5% of MSM.

A minority of the total population was currently married or partnered with a woman (10.6%). This proportion was smaller among TW (0.6%) compared to MSM (13.1%).[4] A third of the participants (31.4%) were currently partnered with a man or TW. One in ten participants (11.1%) of the total sample reported having at least one child. This proportion was smaller among TW (1.3%), compared to MSM (13.7%). Most of the population reported being Catholic (57.3%), followed by Evangelical Christian (21.8%) and Atheist (19.5%).

The median monthly income was US$200 (range 0–3,000). Slightly more than a quarter of participants reported no monthly income (27.8%), while 43.5% earned between US$1–249, and 28.7% earned more than US$250 per month. The primary

[3] A confidence interval around a point estimate indicates the margin of error for the percentage presented. It is calculated based on the standard deviation around the point estimate, or frequency. A confidence level (90% or 95%) indicates the probability of the true frequency for population from which the sample is drawn being within the range given by the confidence interval. For example, 69.7% of the study population is within the age range of 18-24 years old. We are 95% confident that the true value for the population from which our study population is drawn is within 64.2% to 75.5%. When comparing differences between groups, statistical significance was determined by assessing an overlap in confidence interval point estimate using both 90% probability and 95% probability of accuracy.

[4] The question was worded as follows: "Currently are you married with a woman, in a common law union with a woman, single, or do not have a female partner." Thus the question refers specifically to partnerships with a woman. For TW this may imply lesbian relationships, or for both MSM and TW, relationships where the gender identity or sexual orientation is hidden.

sources of income were through employment by others (36.2%) and self-employment (29.7%). A smaller percentage (14.9%) received money from others (parents, remittances, or partner). A substantial proportion (15.0%) reported sex work as their main means of income generation, and this proportion was higher among TW. Almost half (46.6%) of TW reported sex work as their primary means of income generation compared to only 7.3% of MSM. Worries about food and history of incarceration were also explored as measures of social and economic vulnerability. Close to half of the sample worried about having food for themselves or their family in the last 6 months (46.4%). Out of the total population, 15.0% had a history of incarceration. This proportion was significantly higher among TW (24.9%) compared to MSM (12.5%).

Almost half (46.7%) of TW and 7.3% of MSM reported sex work as their primary means of income generation.

Table 4 Socio-demographic characteristics of MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Social network size			
Median number of MSM and TW meeting study eligibility in social network (range)	**8** (1–350)	**12** (1–350)	**10** (1–350)
Median number of TW meeting study eligibility in social network	**0** (0–80)	**4** (0–200)	**1** (0–200)
Age			
18–24	**72.5** (66.2–78.4)	**58.4** (47.6–70.1)	**69.7** (64.2–75.5)
24–34	**20.1** (15.2–26.0)	**31.6** (21.1–42.2)	**22.4** (17.7–27.4)
35–65	**7.4** (4.3–10.5)	**10.0** (3.8–17.2)	**7.9** (4.9–10.8)
Median age (range)	**22** (18–65)	**23** (18–51)	**22** (18–65)
Education			
None / Incomplete primary / Complete primary	**7.1** (4.2–10.0)	**17.1** (10.2–24.2)*	**9.2** (5.9–12.8)
Incomplete secondary	**30.7** (25.0–36.3)	**35.2** (24.3–46.8)	**31.4** (26.3–36.7)
Complete secondary	**25.7** (20.8–31.2)	**27.4** (17.7–38.8)	**26.1** (21.4–31.1)
Incomplete university / Complete university	**36.5** (30.1–43.3)	**20.2** (11.9–29.4)**	**33.3** (27.6–39.2)
Current partnerships			
Currently in a stable partnership with a woman	**13.1** (9.1–17.5)	**0.6** (0.0–1.9)**	**10.6** (7.3–14.2)
Current stable partner who is MSM or TW	**31.5** (26.0–36.8)	**29.2** (19.5–39.0)	**31.4** (26.4–36.1)
Children			
One or more	**13.7** (9.3–19.0)	**1.3** (0.1–3.1)**	**11.1** (7.5–15.2)
Religion			
Catholic	**57.3** (51.2–63.6)	**56.9** (42.0–67.1)	**57.3** (51.4–62.3)
Evangelical Christian	**21.4** (17.1–27.0)	**23.0** (14.0–35.6)	**21.8** (18.1–26.9)
Atheist	**20.1** (14.6–24.9)	**17.9** (9.6–29.5)	**19.5** (15.0–24.1)
Other	**1.2** (0.3–2.2)	**2.2** (0.4–5.1)	**1.4** (0.6–2.3)

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Monthly income†			
No income	**27.1** (22.6–33.2)	**29.0** (18.6–39.5)	**27.8** (23.0–32.4)
US$1–249	**43.4** (36.6–48.2)	**46.6** (36.0–58.2)	**43.5** (38.4–48.6)
≥ US$250	**29.5** (24.7–35.1)	**24.4** (15.4–34.0)	**28.7** (24.3–33.5)
Median income (range)			**US$ 200** (0–3,000)
Primary income generating activity			
Employed by others	**39.9** (31.7–47.3)	**21.3** (13.5–36.9)	**36.2** (29.8–43.2)
Self-employed	**32.2** (25.0–39.8)	**19.5** (7.2–28.6)	**29.7** (22.8–35.7)
Receives money from others (parents, partner, remittances)	**16.8** (10.7–22.8)	**7.1** (1.0–14.9)	**14.9** (9.5–19.9)
Sex work	**7.3** (3.7–13.3)	**46.6** (30.1–61.8)**	**15.1** (10.2–21.6)
Other	**3.7** (1.5–7.5)	**5.5** (0.5–14.2)	**4.2** (2.0–7.6)
Food security			
Worried about food for self or family, last 6 months	**47.4** (41.8–53.4)	**42.3** (31.7–52.7)	**46.4** (41.3–51.7)
Incarceration history			
Ever incarcerated in jail or prison for more than 48 hours	**12.5** (9.9–15.8)	**24.9** (15.9–32.2)*	**15.0** (11.6–18.8)

† 53 current students who do not earn money were dropped from analysis, n = 616

* Significant difference in point estimate with confidence interval set at 0.10

** Significant difference in point estimate with confidence interval set at 0.05

3.2 GENDER IDENTITY AND SEXUAL ORIENTATION

In Table 5, information on gender identity and sexual orientation of study participants is presented. In terms of gender identity, 81.5% of participants self-identified as male and 18.5% self-identified as TW. In terms of sexual orientation for the total sample of participants, approximately equal proportions self-identified as homosexual or gay (41.3%) or bisexual (40.2%), while a minority self-identified as heterosexual (18.5%). Sexual orientation was also calculated separately for males and TW. Among males, most participants self-identified as bisexual (52.0%), followed by gay or homosexual (43.2%), or heterosexual (4.7%). Among TW the opposite was observed. The vast majority of TW self-identified as heterosexual (81.1%), followed by gay or homosexual (11.1%), or bisexual (7.8%). A combined measure of gender identity and sexual orientation was created.[5] Out of the total sample, 37.9% were male and self-identified as gay or homosexual, 43.7% were male and self-identified as bisexual or heterosexual, 14.3% were TW and self-identified as heterosexual, and 4.1% were TW and self-identified as gay or bisexual.

Table 5 Gender identity and sexual orientation of study participants, San Salvador, El Salvador, 2011–2012

	n	Weighted %	95% CI
Sexual-identity			
Male	506	81.5	76.9–85.7
TW	164	18.5	14.3–23.1
Self-identified sexual orientation, total sample			
Gay/homosexual	298	41.3	35.5–46.5
Bisexual	210	40.2	34.6–46.3
Heterosexual	162	18.5	14.5–23.0
Self-identified sexual orientation, males			
Gay/homosexual	279	43.2	35.8–51.1
Bisexual	201	52.0	43.8–58.5
Heterosexual	26	4.7	2.6–8.9
Self-identified sexual orientation, TW			
Gay/homosexual	19	11.1	3.3–25.4
Bisexual	9	7.8	0.7–14.5
Heterosexual	136	81.1	64.9–93.3
Sexual orientation and gender identity, total sample			
Male—gay/homosexual	279	37.9	(32.2–43.3)
Male—bisexual/heterosexual	227	43.7	(38.2–50.5)
TW—heterosexual	136	14.3	(10.6–18.1)
TW—gay/homosexual/bisexual	28	4.1	(2.0–6.0)

[5] The combined measure of gender identity and sexual orientation was used in subsequent bivariate and multivariate analyses.

3.3 HOUSING AND MOBILITY

In Table 6, information on housing and migration is presented. Approximately a quarter of the participants (26.2%) reported that they were homeless or did not have a place to sleep at least one night in the last 6 months. This proportion was larger among MSM (28.6%) compared TW (15.6%). Half of the participants (50.2%) lived in their own house or apartment, 41.8% lived in their parent's or a family member's house, while only 2.3% lived in their partner's house or apartment, and less than 1% lived in a hotel or on the street. Mobility, measured as travel outside the home for one month or longer in the last 12 months was reported by 8.0% of the participants.

Table 6 Housing and mobility of MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506	TW (N = 164)	Total (N = 670)
Unstable housing			
Homeless or did not have a place to sleep at least one night, last 6 months	**28.6** (24.2–33.8)	**15.6** (9.9–22.4)**	**26.2** (22.3–30.6)
Housing (where stayed most nights, last 30 days)			
Own house or apartment	**49.2** (43.3–54.9)	**54.4** (42.9–63.5)	**50.2** (44.7–55.1)
Parents' or family member's house	**43.9** (38.2–49.9)	**32.5** (24.4–45.0)	**41.8** (37.0–47.4)
Partner's house	**1.9** (0.8–3.6)	**4.0** (1.3–8.2)	**2.3** (1.3–3.9)
Hotel or street	**0.8** (0.1–1.8)	**0.6** (0.0–2.0)	**0.7** (0.2–1.7)
Other	**4.1** (2.2–6.4)	**8.5** (2.7–13.1)	**5.0** (2.9–6.90
Mobility			
Traveled out of residence for >one month, last 12 months	**8.9** (6.1–12.1)	**4.4** (1.0–9.2)	**8.0** (5.4–10.8)

** Significant difference in point estimate with confidence interval set at 0.05

3.4 HEALTH STATUS AND CONTEMPLATION OF SUICIDE

Overall, participants reported being in good health (Table 7). The majority (89.4%) reported excellent, very good or good health. Only 10.6% reported fair or poor health. However, more than a quarter (26.8%) of participants reported that they always or sometimes think about committing suicide, an indicator of mental health distress.

Table 7 **Self-reported health status and contemplation of suicide among MSM and TW, San Salvador, El Salvador, 2011–2012**

	% Ponderado (95% IC)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Self-reported health status			
Excellent, very good or good	**89.6** (85.5–93.0)	**88.5** (81.1–94.6)	**89.4** (85.8–92.5)
Fair or poor	**10.4** (7.0–14.5)	**11.5** (5.4–18.9)	**10.6** (7.5–14.3)
Suicide			
Ever contemplated suicide	**26.7** (21.5–32.2)	**27.0** (18.1–37.2)	**26.8** (22.2–31.6)

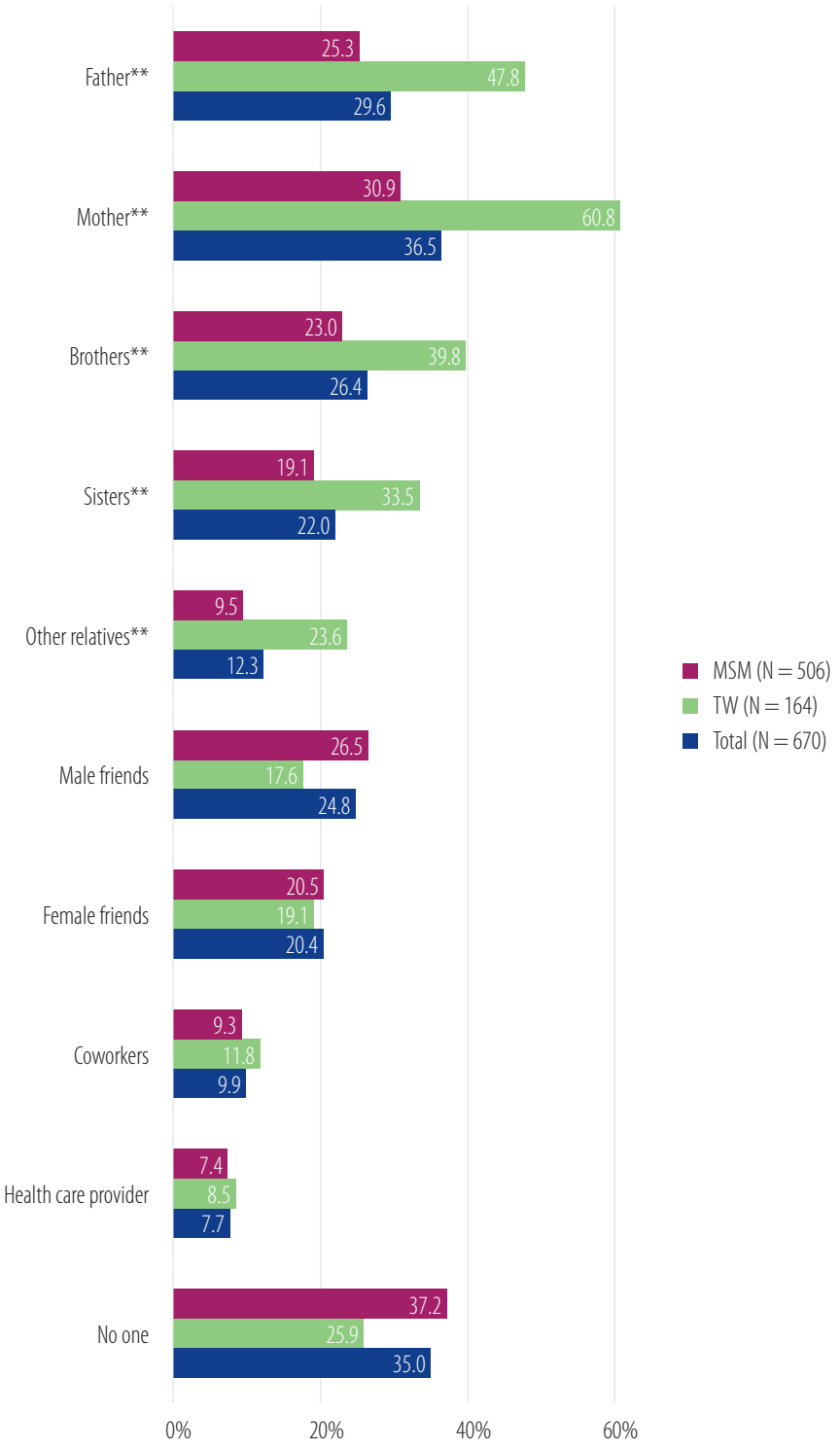
3.5 DISCLOSURE OF SEXUAL ORIENTATION

In Figure 2, the percentage of participants who had actively told family, friends, co-workers, or health providers that they formed sexual relationships with men or TW is presented. A total of 52.9% had disclosed to a family member that they have sexual relationship with men or TW. Slightly more than one third (36.5%) of participants had revealed that they have sexual relationships with men or TW to their mother. Disclosure of sexual behavior with men or TW was next highest among fathers (29.6%), followed by brothers (26.4%), male friends (24.8%), sisters (22.0%), female friends (20.4%), other relatives (12.3%), and coworkers (9.9%). Less than one out of every 10 participants (7.7%) had ever told a doctor, nurse or other healthcare provider that they have sexual relationships with men or TW.

Overall, TW were more likely to reveal that they have sex with men or TW to other people. Statistically significant differences in disclosure of this behavior between TW and MSM was found for disclosure to a mother (60.8% TW compared to 30.9% MSM), father (47.8% TW compared to 25.3% MSM), brothers (39.8% TW compared to 23.0% MSM), sisters (33.5% TW compared to 19.1% MSM), and other relatives (23.6% TW compared to 9.5% MSM).

Nearly one third of MSM and TW (35.0%) had never revealed that they have sex with other men or TW to any other person.

Figure 2 **Percentage of participants who actively told each type of family or social relations that he forms sexual relationships with men or TW**



** Significant difference in point estimate with confidence interval set at 0.05

3.6 VIOLENCE AND ABUSE

Participants were asked to report violence and abuse experienced due to their sexual orientation or gender identity, as well as experiences of sexual assault. One out of every five participants (21.6%) reported abuse or maltreatment in the last 12 months due to their gender identity or orientation. The definition of abuse and maltreatment was read aloud to each participant as follows: "hitting, punching, kicking, threats, scolding, or humiliations." There were no statistically significant differences in these forms of violence reported by TW compared to MSM. One in five (20.8%) participants also reported being sexually assaulted ever in their life. Approximately one in 10 (8.3%) reported being sexually assaulted in the last 12 months.

Table 8 Violence and abuse experienced by MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Victim of abuse or maltreatment because of gender identity or sexual orientation			
Last 12 months	**21.7** (17.6–26.3)	**20.8** (13.4–29.6)	**21.6** (18.0–25.6)
Survivor of sexual assault			
Ever	**18.8** (14.5–23.1)	**28.5** (19.8–39.0)	**20.8** (17.1–25.0)
Last 12 months	**7.9** (5.0–11.2)	**9.6** (5.6–14.8)	**8.3** (5.4–10.8)

3.7 CHAPTER 3 SUMMARY

- Most study participants were young, between the ages of 18–24 years old.
- In terms of education, approximately half the participants completed high school or had some college education. TW completed less education than MSM.
- Few participants were currently in a partnership with a woman, while one third of participants were currently partnered with a man or TW.
- The median monthly income was $200. A quarter of participants reported no monthly income. A total of 15.1% reported sex work as their primary means of income generation. Almost half of TW (46.6%) reported sex work as their primary means of generating income, compared to 7.3% of MSM.
- Almost half of the participants (46.4%) worried about food for themselves of their family in the last 6 months.
- More TW (24.9%) had a history of incarceration compared to MSM (12.5%).
- A total of 26.2% were homeless or did not have a place to sleep at least one night in the last 6 months. This percentage was higher for MSM (28.6%) compared to TW (15.6%).
- The majority of participants self-identified as men (81.5%), while 18.5% of the sample self-identified as TW. The majority of men self-identified as bisexual (52.0%), while the majority of TW self-identified as heterosexual (81.1%).
- While the vast majority reported that their health status was excellent, very good or good, a quarter of participants (26.8%) reported contemplating suicide, an indication of mental health distress.
- One third of participants (35.0%) had never told anyone that they form sexual relationships with men or TW.
- Only 7.7% had disclosed to a healthcare provider that they form sexual relationships with men or TW.
- Disclosure of gender identity and sexual orientation was most common to mothers (36.5%), followed by fathers, brothers, and male friends. TW were more likely than MSM to have disclosed this information.
- Experience of sexual assault (20.8% ever, and 8.3% in last 12 months), and maltreatment due to sexual orientation (21.6%) in the last 12 months was high.

Chapter 4 HIV Knowledge, Sexual Behavior, and Substance Use

4.1 HIV KNOWLEDGE

In this chapter, descriptive information on HIV knowledge, perceived risk for HIV, and HIV risk behavior including sexual behavior and substance use is presented. These variables were included in the current study because they are informative for the development of HIV services. To ensure appropriate targeting of interventions, it is also important to know if persons at greatest risk are using health services. As in Chapter 3, results are presented for the total population, and are disaggregated by MSM and TW groups. Comparison across MSM and TW are noted in the text only when there is a statistically significant difference based on 90% and 95% confidence intervals around the point estimate.

Knowledge about HIV was high among participants (Table 9). Participants were asked to describe all the ways that HIV can be prevented using an open-ended question. Almost all of the participants (91.9%) reported condom use as a method of HIV prevention. After condom use, sexual abstinence (62.6%), and monogamy (62.2%) were the most commonly reported methods for HIV prevention. Just over half of the participants (55.0%), reported not sharing needles as a way to prevent HIV. A composite score for HIV knowledge was created to measure the number of participants who spontaneously described two or more correct methods of HIV prevention. A majority of participants (70.6%) knew two or more methods of HIV prevention. TW were more likely to know two or more HIV prevention methods compared to MSM (80.6% compared to 68.0%). In addition to prevention methods, almost all participants (97.1%) correctly answered a question about a common HIV misconception, and knew that a person with HIV can look healthy.

Table 9 HIV knowledge among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N =490)	TW (N = 158)	Total (N = 648)
Methods of HIV prevention mentioned spontaneously			
Not sharing needles	**52.6** (47.0–58.5)	**65.1** (54.0–76.3)	**55.0** (49.9–60.6)
Not have sexual relations	**60.9** (55.2–65.9)	**69.3** (58.5–80.5)	**62.6** (57.6–67.6)
Using condoms correctly	**91.7** (88.3–94.7)	**91.9** (83.7–97.7)	**91.9** (88.7–94.5)
Having only 1 sexual partner	**59.7** (54.2–65.2)	**71.2** (61.1–80.7)	**62.2** (57.1–67.2)
HIV knowledge			
Composite: knows 2 or more HIV prevention methods	**68.0** (63.5–72.0)	**80.6** (73.1–87.6)*	**70.6** (66.0–75.1)
Knows that a person with HIV can look healthy	**97.6** (95.7–99.0)	**95.1** (88.3–99.3)	**97.1** (95.3–98.6)

4.2 HIV RISK PERCEPTION

Participants were asked their opinion about their degree of personal risk for contracting HIV.[6] This was measured using two items. These items elicited participant's perception of risk currently and in the future. A 4-point Likert response scale was used with anchors from 1 to 4 ranging from "impossible" to "very possible." About half of participants thought that it was very or somewhat possible that they were currently infected with HIV (34.1% very possible, 17.4% somewhat possible). Approximately two thirds of participants thought that it was very or somewhat possible that they would contract HIV in the future (37.9% very possible, 32.4% somewhat possible). The median score for participants in this study was 6 (range 2–8), indicating a high level of perceived risk. Cronbach's alpha for the aggregate measure demonstrated good internal consistency (0.79). In subsequent analysis presented in this report, the variable of perceived risk for HIV is presented as a categorical variable using "high" and 'low" categories based on a median split.

[6] The construction and analysis of the perceived risk for HIV variable excludes 5 participants, who indicated that they were HIV positive in response to an open-ended question about reasons for not having tested for HIV in the last 12 months.

Table 10 **Perceived risk for HIV infection among MSM and TW, San Salvador, El Salvador, 2011–2012**

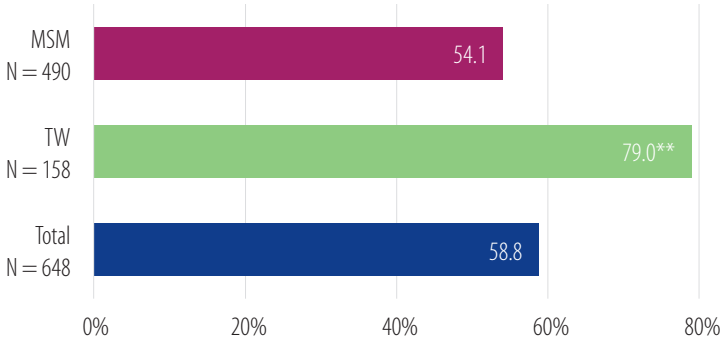
	Weighted % (95% CI)		
	MSM (N = 490)	TW (N = 158)	Total (N = 648)
Possibility that participant is currently infected with HIV			
Impossible	**12.7** (8.7–17.3)	**7.7** (0.9–14.9)	**11.5** (7.9–15.5)
Not very possible	**39.4** (33.8–45.5)	**24.6** (14.0–34.7)	**37.0** (31.7–42.4)
Somewhat possible	**17.0** (12.9–21.2)	**18.5** (10.8–26.9)	**17.4** (13.7–21.4)
Very possible	**30.9** (25.0–36.3)	**49.2** (39.3–63.0)**	**34.1** (28.8–29.4)
Possibility that participant will ever become infected with HIV			
Impossible	**8.1** (5.0–11.4)	**9.3** (3.1–17.5)	**8.2** (5.4–11.3)
Not very possible	**22.9** (18.1–28.3)	**15.2** (6.5–25.6)	**21.6** (17.3–26.5)
Somewhat possible	**34.1** (29.1–40.4)	**23.1** (15.8–32.3)	**32.4** (27.7–37.5)
Very possible	**34.8** (29.6–39.2)	**52.3** (41.7–61.4)*	**37.9** (32.4–42.8)
Aggregate perceived risk			
Median (range)	**6** (2–8)	**6** (2–8)	**6** (2–8)
Cronbach's alpha	0.786	0.732	0.776

* Significant difference in point estimate with confidence interval set at 0.10

** Significant difference in point estimate with confidence interval set at 0.05

Social proximity to a person living with HIV (PLHIV) was high among study participants (Figure 3). More than half (58.8%) of participants reported that they know at least one PLHIV. This percentage was higher among TW compared to MSM. The vast majority of TW (79.0%) knew someone living with HIV, while slightly more than half of all MSM (54.1%) reported knowing a PLHIV.

Figure 3 **Percentage of participants who know at least one person living with HIV, among MSM and TW, San Salvador, El Salvador, 2011–2012**



** Significant difference in point estimate with confidence interval set at .05

4.3 HISTORY OF SEXUALLY TRANSMITTED INFECTIONS

A minority of participants reported a history of a sexually transmitted infection (STI). This question was asked using symptomology of STI as follows: "Have you ever had secretion, pus, ulcers, boils, or warts on or near your penis or anus?" Only 12.3% of participants reported ever having an STI. Only 27 participants (5.9%) reported having an STI in the last 12 months (Table 11). No additional information about experience receiving STI services is presented because of the low number of respondents in this section.

Table 11 Sexually transmitted infection history among MSM and TW, San Salvador, El Salvador, 2011-2012

History of sexually transmitted infections	Weighted % (95% CI)		
	MSM (N = 504)	TW (N = 164)	Total (N = 668)
Ever	**13.2** (9.6–17.2)	**9.7** (4.8–16.3)	**12.3** (8.7–16.4)
Last 12 months	**6.5** (4.0–9.8)	**3.2** (0.5–7.0)	**5.9** (3.3–9.0)

4.4 SEXUAL BEHAVIOR

In Table 12, information on age at sexual debut, number of lifetime sexual partners and condom use is presented. The median age at first sex for participants was 15 years (range 1–29). The proportion of participants reporting their first sexual encounter when they were 14 years old or younger was larger for MSM (66.3%) compared to TW (45.8%). The median number of lifetime sexual partners reported by the total sample of participants was 15 (range 1–100,000). The proportion of participants reporting more than 16 lifetime sexual partners was higher among TW (52.8%) compared to MSM (34.5%). The number of lifetime sexual partners was also calculated excluding participants who reported practicing sex work ever in their life. When limiting the sample to participants who did not report sex work, the median number of lifetime partners was 7 (range 1–1,000).

The median age at first sex for participants was 15 years old. MSM were more likely than TW to report age at first sex as 14 years old or younger.

A minority of participants reported having had no sexual partners in the last 6 months (8.6%).[7] More than half of the participants (58.5%) reported having only one sexual partner in the last 6 months. One third of participants (33.0%) reported having 2 or more sexual partners in the last 6 months. The vast majority of participants (79.9%)

[7] Note that sexual activity with a man or TW ever in their lifetime was an eligibility requirement for participation.

reported using a condom the last time they had sex. Similarly, approximately two thirds of participants (66.9%) reported always using condoms with their most recent sexual partner. A total of 25.5% reported using condoms sometimes, while only 7.6% reported never using condoms with their most recent sexual partner.

Table 12 Age at first sex, number of sexual partners and condom use among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Age at first sex			
Median (range)	**15** (1–29)	**14** (1–25)	**15** (1–29)
< 14 years old	**66.3** (61.0–71.8)	**45.8** (35.5–58.0)**	**62.2** (56.9–67.6)
Number of lifetime sexual partners			
Median (range)	**12** (1–2,000)	**50** (1–5,000)	**15** (1–5,000)◊
≥ 16 sexual partners	**34.5** (28.7–40.6)	**52.8** (40.8–65.0)**	**38.2** (32.9–43.8)
Number of lifetime sexual partners, excluding participants who have sold sex			
Median (range)	**7** (1–350)	**8** (1–1,000)	**7** (1–1,000)
≥ 8 sexual partners	**39.9** (32.3–47.6)	**39.9** (22.8–60.3)	**40.0** (32.8–47.2)
Number of sexual partners in the last 6 months			
No sexual partners	**8.9** (5.7–12.6)	**6.6** (1.9–13.0)	**8.5** (5.8–11.8)
1 sexual partner	**60.0** (54.9–66.2)	**53.8** (44.6–66.2)	**58.5** (54.1–63.9)
≥ 2 sexual partners	**31.1** (24.8–36.4)	**39.6** (27.3–48.8)	**33.0** (27.3–37.5)
Last sexual partner†			
Used a condom at last sex	**79.0** (74.0–83.9)	**84.9** (76.7–91.2)	**79.9** (75.7–84.4)
Frequency of condom use with most recent sexual partner			
Never	**7.4** (4.6–10.7)	**8.2** (3.5–15.1)	**7.6** (5.1–10.6)
Sometimes	**26.6** (21.1–32.1)	**21.4** (13.2–32.7)	**25.5** (20.6–30.6)
Always	**66.0** (60.0–72.0)	**70.3** (57.6–79.5)	**66.9** (61.3–72.1)

** Significant difference in point estimate with confidence interval set at 0.05

† Among those having sex in the last six months (n = 623)

◊ 3 values over the 75th percentile

Transactional sex was common among study participants (Table 4.5). Almost half of the study sample (47.0%) reported that they had ever exchanged sex to receive goods at some point in their life. One third of participants (33.5%) reported exchanging sex to receive money or goods in the last 12 months. Transactional sex ever, and in the last 12 months, was more common among TW compared to MSM (Ever: 60.5% among TW compared to 44.2% among MSM; last 12 months: 53.4% among TW compared to 29.0% among MSM). Participants were less likely to report being a client of transactional sex than receiving money or goods for sex. Only 17.7% reported giving a person money, drugs, food, clothing or a place to stay in exchange for sex.

Table 13 Exchange of resources for sex among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Received money, drugs, food, clothing or a place to sleep in exchange for sex			
Ever	**44.2** (38.7–49.0)	**60.5** (51.2–71.5)*	**47.0** (41.6–52.4)
Last 12 months	**29.0** (24.0–34.4)	**53.4** (41.3–65.2)**	**33.5** (28.9–38.5)
Gave money, drugs, food, clothing or a place to sleep in exchange for sex (client)			
Last 12 months	**16.7** (12.5–20.9)	**21.8** (14.0–30.5)	**17.7** (14.0–21.4)

* Significant difference in point estimate with confidence interval set at 0.10
** Significant difference in point estimate with confidence interval set at 0.05

4.5 USE OF ALCOHOL AND ILLICIT SUBSTANCES

In Table 14 the frequency of alcohol use and illicit substance use is presented. Over half of the participants reported alcohol consumption on the last 30 days. Binge drinking was common among participants. The majority of participants (60.5%) reported consuming 5 or more servings of alcohol on one occasion during the last 30 days. Among participants who reported a sexual partner in the last 6 months, a quarter (26.1%) reported that either they or their partner drank alcohol the last time they had sex.

Binge drinking was common among participants. The majority of participants (60.5%) reported consuming 5 or more servings of alcohol on one occasion during the last 30 days. Among participants who reported a sexual partner in the last 6 months, a quarter (26.1%) reported that either they or their partner drank alcohol the last time they had sex.

Illicit drugs were defined as marijuana, heroin, ecstasy, glue, crack, cocaine, or amphetamines. One out of every 5 participants (20.2%) reported use of illicit drugs ever in their lifetime. A total of 15.3% reported illicit drug use in the last 30 days. One out of every 10 participants (11.3%) reported consumption of cocaine or crack in the last 30 days. Among participants who reported having sex in the last 6 months, a total of 8.7% reported that they or their partner used illicit drugs the last time they had sex.

Table 14 Substance use and sexual behavior among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Alcohol consumption			
Any alcohol consumed in last 30 days	**63.3** (57.5–69.3)	**54.4** (43.4–65.6)	**61.9** (56.7–67.2)
5+ servings of alcohol consumed in last 30 days	**61.6** (56.0–67.6)	**54.4** (43.6–65.8)	**60.5** (55.5–65.8)
Respondent or any of last 3 sex partners in the last 6 months drank alcohol at last sex^	**26.9** (22.5–33.2)	**22.3** (14.5–32.6)	**26.1** (22.3–31.6)
Illicit drug use			
Ever consumed drugs	**20.3** (15.6–25.3)	**18.9** (12.2–26.9)	**20.2** (16.0–24.6)
Consumed drugs in last 30 days	**15.0** (11.0–19.2)	**16.5** (10.3–23.5)	**15.3** (11.8–19.1)
Consumed cocaine or crack in last 30 days	**10.6** (7.0–14.4)	**13.8** (8.3–20.1)	**11.3** (8.1–14.7)
Respondent or any of last 3 sex partners in last 6 months used drugs at last sex*	**9.2** (6.2–12.8)	**6.8** (3.4–10.8)	**8.7** (6.3–11.8)

* Among those who had sexual relations in the last 6 months (n=623)

4.6 SEXUAL PARTNER CHARACTERISTICS

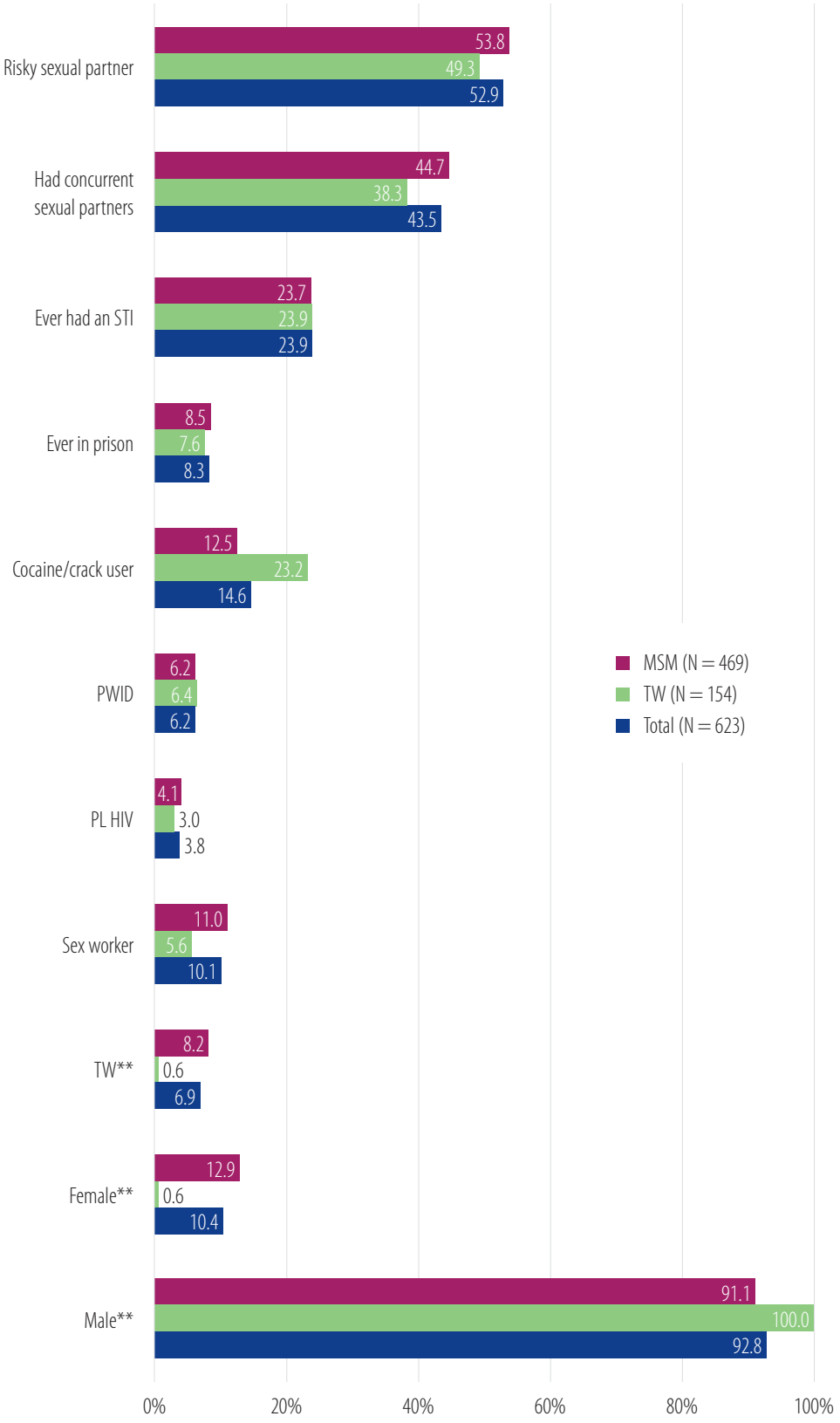
Risk of acquisition of HIV/STI is contingent on both personal behavior, as well as exposure to infection through a sexual partner who is infected. Information on partnership patterning, namely linkages across high and low risk individuals, is also important to understand the potential for infectious disease to spread throughout a population. For these reasons, it is important to characterize partner risk behavior as well as individual risk behavior in relation to HIV/STI.

In this study, participants were asked to provide descriptive information on their three most recent sexual partners during the last 6 months. The information elicited was anonymous, and only asked participants to provide their perception of traits for each sexual partner. In Figure 4, information on these traits is presented, including gender, HIV/STI-related risk behaviors, and characteristics associated with a higher prevalence of HIV/STI for sexual partners.

Among participants who were sexually active in the last 6 months, almost all (91.1%) reported having sex with a male sexual partner. A minority reported a sexual partner who was female (12.9%) or a TW (8.2%). In terms of sexual risk behavior and related traits for partners, the most common one reported was perceived partner sexual concurrency. Just less than half (43.5%) of participants reported that at least one of their sexual partners had other sexual partners in addition to them. Just under a quarter of participants (23.7%) reported a partner who has ever had an STI. In terms of substance use, 12.5% reported having at least one sexual partner who consumes crack or cocaine, and 6.2% reported that at least one partner is a person who injects drugs (PWID). One out of every ten participants (11.0%) reported that one of their partners was a sex worker.[8] A similar percentage (8.5%) reported a sexual partner who had ever been incarcerated. A total of 4.1% reported that at least one of their partners was a PLHIV. The described risk behavior and traits were combined to form an aggregate measure of having a risky sexual partner. Slightly more than half (53.8%) of sexually active participants, reported at least one risky sexual partner in the last 6 months, with the most common risk characteristics being perceived partner concurrency.

[8] Note, having a partner who is a sex worker does not indicate whether or not the participant is a client of commercial sex. It only indicates the participant's perception that one of their partners exchanges sex to receive goods.

Figure 4 **Sexual partner characteristics of three most recent sexual partners during the last 6 months, among sexually active MSM and TW, San Salvador, El Salvador, 2011–2012†**



† Among those who had sexual relations in the last 6 months (n = 623)

** Significant difference in point estimate with confidence interval set at 0.05

4.7 CHAPTER 4 SUMMARY

- Knowledge of how to prevent HIV transmission was high among participants. Commonly mentioned prevention strategies included condom use (91.9%), followed by sexual abstinence and sexual monogamy. TW were more likely than MSM to know two or more HIV preventions strategies.
- Participants in this study had a high level of perceived risk for HIV.
- Most participants in this study know a person living with HIV (PLHIV) (58.8%). TW were more likely to know a PLHIV (79.0%) compared to MSM (54.1%).
- Few MSM and TW reported ever having a sexually transmitted infection (12.3%).
- Median age at first sex was 15 years old for the total sample. MSM (66.3) were more likely than TW (45.8) to report age at first sex at 14 years old or younger.
- The median number of lifetime sexual partners was 15 for the total sample. The median number of lifetime sexual partners was higher for TW (50 sexual partners) compared to MSM (12 sexual partners).
- Most MSM and TW in this study had one sexual partner in the last 6 months (58.5%). Multiple sexual partnerships in the last 6 months was reported by 33.0% of participants, while 8.6% reported no sexual partners in the last 6 months.
- The vast majority of MSM and TW in this study reported condom use at last sex (79.9%).
- Almost half of the participants (47.0%) reported receiving money, drugs, food, clothing or a place to sleep in exchange for having sex ever in their life, and a third reported sex in exchange for the receipt of these resources in the last 12 months. TW were more likely to report sex in exchange for resources than MSM. Fewer participants reported being clients of sex workers.
- Binge drinking was common among study participants, with 60.5% of respondents having 5 or more servings of alcohol on one occasion in the last 30 days. Use of alcohol by the participant or their partner at last sex was reported by approximately one quarter of participants.
- A total of 15.3% used illicit drugs in the last 30 days, and 11.3% of participants used cocaine or crack in the last 30 days. Use of illicit drugs by the participant or their partner at last sex was reported by 8.7% of participants.
- Just over half of the participants reported a high risk sex partner in the last 6 months. This includes report of perceived partner concurrency (43.5%), a partner perceived as likely to have had an STI (23.7%), or a partner who consumes crack or cocaine (12.5%) as the most common types of sexual partner risk.

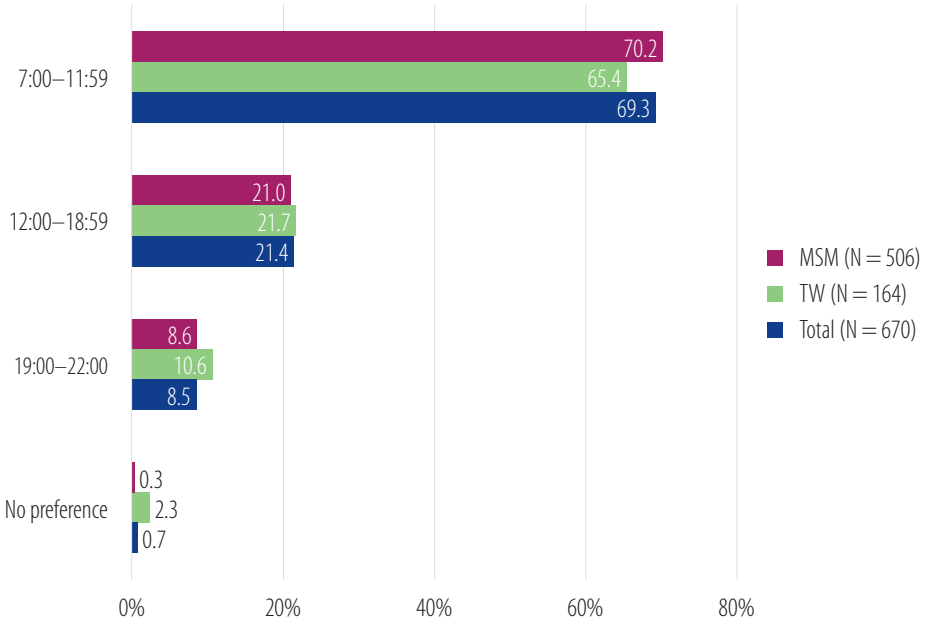
Chapter 5 Health Service Utilization: Preferences, Frequency and Correlates

In this chapter, information on preferences for health services and health service utilization (HSU) among MSM and TW are presented. As in previous chapters, frequencies are presented for the total sample, and disaggregated for MSM and TW groups. Statistically significant differences between these groups are noted in the text based on point estimates and 90% and 95% confidence intervals. Descriptive characteristics in this chapter, and selected characteristics relevant to health seeking behavior presented in Chapters 3 and 4, were analyzed in relation to the outcome of health service utilization in the last 12 months. Factors demonstrating a statistically significant association with health service utilization in the last 12 months in bivariate and multivariate models are presented.

5.1 PREFERENCES FOR HEALTH SERVICE DELIVERY

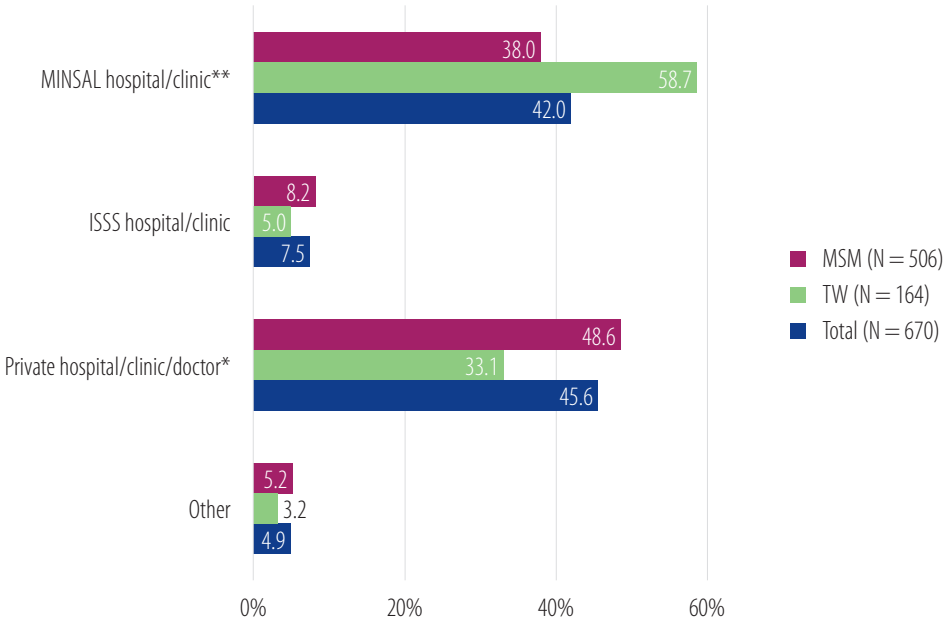
Most participants (69.3%) preferred visiting a health facility in the morning from 7:00–11:59, followed by the afternoon from 12:00–18:59 (21.4%), and the evening from 19:00–22:00 (8.7%) (Figure 5).

Figure 5 Preferred time of day for visiting a health facility among MSM and TW, San Salvador, El Salvador, 2011–2012



Most participants preferred to go to a private hospital, clinic or doctor (45.6%), followed by a preference for hospitals and clinics operated by the Ministry of Health (MINSAL) (42.0%) (Figure 6). TW were more likely to prefer a MINSAL hospital or clinic (58.7%), while MSM were more likely to prefer a private hospital, clinic or doctor (48.6%). A minority of participants preferred a hospital or clinic operated by the Salvadoran Institute of Social Security (ISSS) (7.5%).

Figure 6 **Preferred type of health center for general health services among MSM and TW, San Salvador, El Salvador, 2011–2012**



* Significant difference in point estimate with confidence interval set at 0.10
** Significant difference in point estimate with confidence interval set at 0.05

In Table 15, preferences in relation to the type of service provider are presented. Two thirds of participants (64.4%) preferred to receive health services from a general practitioner. One third of participants (33.8%) preferred to receive health services from a specialist. One third of participants (33.0%) preferred that their healthcare provider be a sexual minority, followed by a preference for a female healthcare provider (25.5%), or a male healthcare provider (22.2%). A total of 19.3% had no preference regarding the sexual orientation or gender of their healthcare provider.

64.4% of participants preferred to receive health services from a general practitioner

Table 15 Provider-related preferences for health services among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Preferred type of healthcare provider			
General practitioner, doctor	**63.8** (58.0–70.2)	**67.2** (55.9–78.3)	**64.4** (58.8–69.9)
Specialist, doctor	**34.4** (28.2–40.2)	**31.1** (20.3–42.5)	**33.8** (28.5–39.4)
Other	**1.8** (0.6–3.2)	**1.6** (0.0–4.0)	**1.7** (0.7–3.0)
Preferred gender identity and orientation of provider			
Male	**23.0** (16.0–24.9)	**30.1** (20.1–41.1)	**22.2** (17.8–26.7)
Female	**24.7** (19.7–29.7)	**28.7** (18.0–38.6)	**25.5** (21.0–30.4)
A sexual minority (gay, bisexual, transgender)	**34.3** (29.0–39.6)	**27.4** (18.9–38.5)	**33.0** (28.3–38.0)
No preference	**20.3** (16.0–24.9)	**13.8** (7.0–21.2)	**19.3** (15.4–23.1)

In Table 16, information on the preferred type of specialist is presented separately for MSM and TW. As noted previously, only 33.8% of the total sample reported a specialist as their preferred type of healthcare provider.

Among MSM, 34.4% preferred a specialist. Out of the 34.4% of MSM who preferred a specialist, one quarter preferred either an urologist (27.5%) or a proctologist (27.4%). The next most commonly reported preferred specialist among MSM was an infectious disease specialist (15.8%). A total of 16.1% reported no preference in type of specialist.

Nearly one third (31.1%) of TW preferred a specialist. Out of the 31.1% of TW who preferred a specialist, just over one quarter preferred a proctologist (26.6%) followed by endocrinologist (20.6%) and gynecologist (19.2%). A total of 11.4% of TW reported no preference for a particular type of specialist.

Table 16 **Medical specialist preferences among MSM and TW who prefer a specialist for health services San Salvador, El Salvador, 2011–2012**

	n	Weighted %	95% CI
MSM (N = 162)			
Urologist	36	27.5	18.5–37.7
Proctologist	41	27.4	18.1–38.2
Infectious disease specialist	27	15.8	8.1–24.2
No preference	36	16.1	9.8–23.2
Other	22	13.2	6.6–20.8
TW (N = 55)			
Proctologist	12	26.6	8.7–45.5
Endocrinologist	12	20.6	5.4–40.3
Gynecologist	15	19.2	5.1–38.7
No preference	6	11.4	2.7–23.6
Other	10	22.2	5.5–41.6

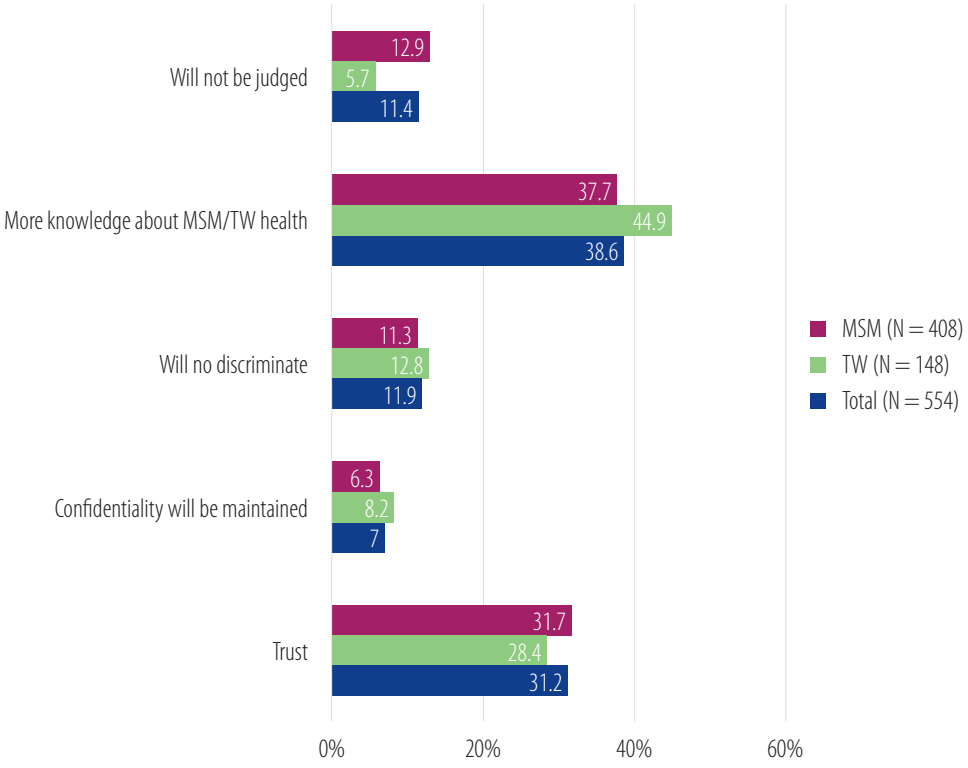
The majority of participants (76.2%) stated a preference for a healthcare provider who focuses on the health needs of MSM or TW. Similarly, 78.2% reported a preference for a health center that specializes in healthcare for MSM and TW (Table 17).

Table 17 **Preferences specialized services for MSM and TW, San Salvador, El Salvador, 2011–2012**

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Prefers a health care provider who focuses on the health needs of MSM or TW	**75.7** (70.6–80.6)	**77.3** (66.8–86.7)	**76.2** (71.7–80.5)
Prefers a health center that specializes in healthcare for MSM and TW	**77.5** (72.4–82.1)	**81.7** (71.2–90.3)	**78.2** (74.0–82.8)

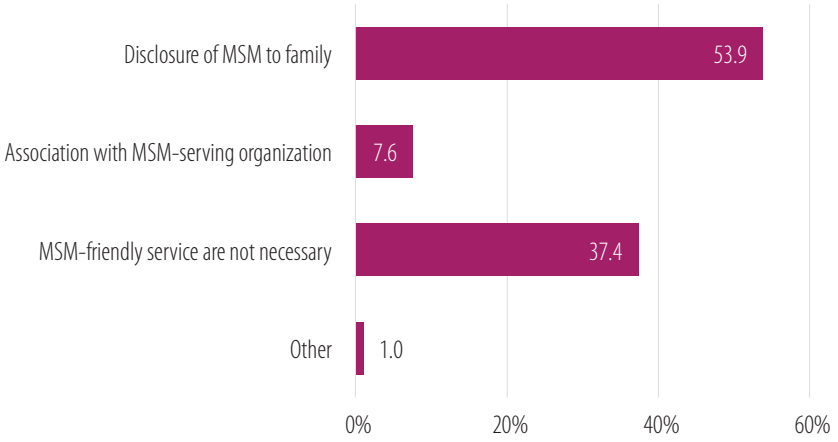
Participants who preferred a healthcare provider or health center that focuses on the health needs of MSM and TW were asked to provide the most important reason for this preference. The main reason for preferring this type of service among participants was the belief in the provider's improved technical skill in providing healthcare services to MSM and TW populations. A total of 38.6% of participants reported that they prefer this type of provider because he or she would have more knowledge about the health needs of MSM and TW. The second most common reason for this preference was an increased sense of trust in this type of provider (31.2%). Only 11.9% felt that the main reason this type of provider was important was because they would not discriminate against MSM and TW, followed by 11.4% that reported that this type of provider would not judge them. Finally, 7.0% reported that confidentiality was the most important reason for this preference (Figure 7).

Figure 7 **Reasons for preferring a health center that specializes in health care for MSM and TW among MSM, San Salvador, El Salvador, 2011–2012**



Participants who did not prefer a healthcare provider or health center focused on the needs of MSM and TW were also asked to provide the main reason for not preferring this type of provider (Figure 8). Just over half (53.9%) of participants who did not prefer services designated as MSM-friendly feared that it would reveal their sexual orientation to their family. Subsequent to the fear of unintended sexual orientation disclosure, 37.4% felt that this type of specialized service was not necessary, followed by the fear that they would be associated with an organization serving MSM or TW if they sought services at this type of facility or provider (7.6%).

Figure 8 **Reasons for not preferring a health center that specializes in healthcare for MSM and TW, San Salvador, El Salvador, 2011–2012†**

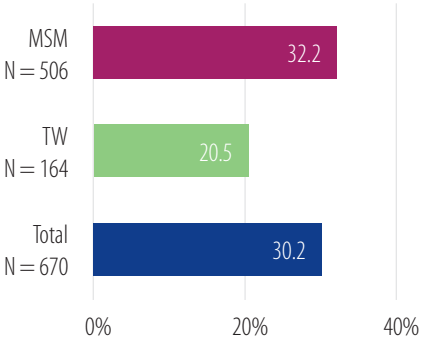


† Percentages for MSM and TW were not calculated separately for this variable due to small cell sizes

5.2 HEALTH SERVICE UTILIZATION

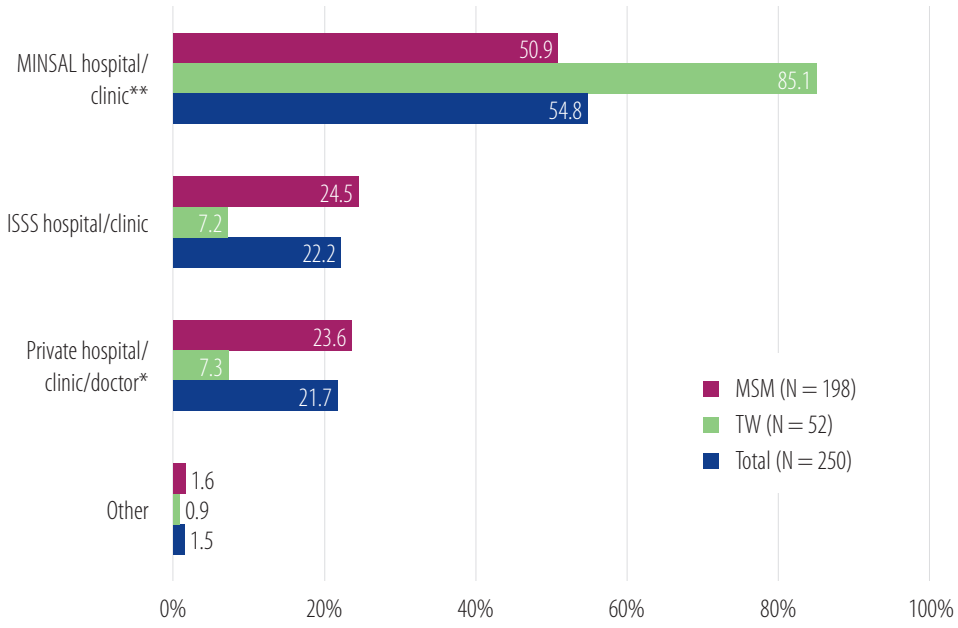
The main focus of this investigation is on the use of health services among MSM and TW, as a means of identifying any potential gaps and barriers to service coverage. Just under one third of participants used health services in the last 12 months (30.2%) (Figure 9).

Figure 9 **Percentage who visited a doctor or other healthcare provider in the last 12 months, among MSM and TW, San Salvador, El Salvador, 2011–2012**



In Figure 10, information on the type of facility used by participants who visited a doctor or other healthcare provider is presented. Of the 30.2% of participants who used health services in the last 12 months, the majority (54.8%) received healthcare from a MINSAL hospital or clinic. The second most commonly attended type of health facility was an ISSS hospital or clinic (22.2%), followed by a private hospital, clinic, or doctor (21.7%). TW were more likely to have received healthcare from a MINSAL hospital or clinic (85.1%) compared to MSM (50.9%). MSM were more likely to have received healthcare from a private hospital, clinic or doctor (23.6%) compared to TW (7.3%).

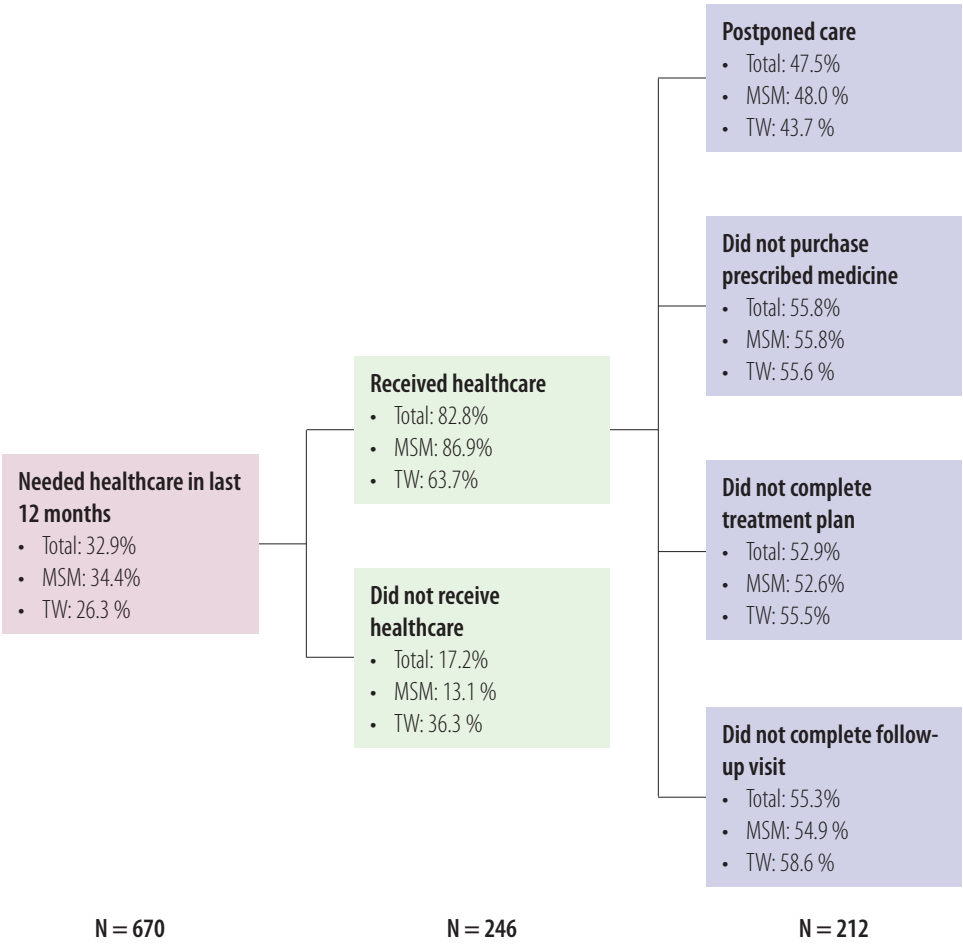
Figure 10 **Type of facility visited when accessing health care in the last 12 months, MSM and TW, San Salvador, El Salvador, 2011–2012**



* Significant difference in point estimate with confidence interval set at 0.10
** Significant difference in point estimate with confidence interval set at 0.05

In addition to actual use of health service in the last 12 months, participants were also asked about their need for health services and subsequent utilization. Information on need and utilization of health services is presented in Figure 11. Approximately one third of participants (32.9%) reported that they needed health services in the last 12 months. Out of those participants who needed healthcare, the majority (82.8%) received care, while 17.2% did not receive care. Out of those who needed and received care, about half postponed care but eventually got it (47.5%), were prescribed a medication but did not purchase it (55.8%), did not complete the treatment plan advised by their healthcare provider (52.9%), or did not complete all the suggested follow-up visits (55.3%).

Figure 11 **Health service utilization and compliance among MSM and TW needing healthcare in the last 12 months, San Salvador, El Salvador, 2011–2012**



5.3 DETERMINANTS OF HEALTH SERVICE UTILIZATION

A usual source of healthcare and economic support for healthcare through health insurance are important factors to consider in relation to health seeking behavior (Table 18). In this study, 22.2% of participants were affiliated with or beneficiaries of public or private health insurance. Among those with health insurance, the majority (86.8%) had insurance through social security, and 15.2% had insurance through a private company. Just under a quarter of participants (24.3%) had a regular doctor, nurse, or other healthcare provider. The percentage with a regular healthcare provider was lower for TW (14.0%) compared to MSM (26.6%). Just under a third of participants (30.1%) had access to a regular source of care through a health facility.

Table 18 Health insurance and regular source of care among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Access to health insurance			
Affiliated with or beneficiary of public of private health insurance	**25.3** (19.9–31.1)	**9.7** (4.6–15.9)**	**22.2** (17.7– 27.4)
Type of insurance, among those with insurance (n=155)†			
Social security	—	—	**86.8** (79.5–93.4)
Private health insurance	—	—	**15.2** (7.8–22.9)
Access to a regular health care provider or facility			
Has a regular doctor, nurse, or other healthcare provider	**26.6** (21.7–31.7)	**14.0** (8.7–21.0)**	**24.3** (20.2–28.7)
Has a regular health facility	**32.0** (26.7–37.1)	**21.4** (13.3–30.1)	**30.1** (25.4–34.6)

† Percentages for MSM and TW were not calculated to this variable due to small cell sizes

** Significant difference in point estimate with confidence interval set at 0.05

Table 19 presents the association between usual source of care, health insurance, and health service utilization in the last 12 months. Participants who had access to health insurance were more likely to have used health services in the last 12 months compared to participants without health insurance (55.5% of persons with insurance used services compared to 22.9% of persons without insurance). Having a regular source of care through a regular provider or health facility was also associated with use of health services in the last 12 months. A total of 69.3% of persons with a regular healthcare provider used health services compared to only 17.7% of persons who did not have a regular provider. A total of 42.8% of participants who had a regular health facility used health services in the last 12 months, compared to only 23.4% of those who did not have a regular facility.

Table 19 Correlates of health service utilization in the last 12 months among MSM and TW, San Salvador, El Salvador, 2011–2012

		Used healthcare services in the last 12 months		
		N	Weighted %	95% CI
Affiliated with or beneficiary of public of private health insurance	No	514	22.9	18.6–27.8**
	Yes	155	55.5	43.0 –67.0
Has a regular doctor, nurse, or other healthcare provider	No	470	17.7	12.7–22.6**
	Yes	199	69.3	58.8–79.5
Has a regular health facility	No	418	23.4	18.3–28.4**
	Yes	251	42.8	31.9–48.9

** Significant difference in point estimate with confidence interval set at 0.05

Participants were also asked about their current ability to access a healthcare provider with characteristics supportive of MSM and TW populations, and with whom they felt comfortable asking question about HIV/STI and sexual behavior (Table 20). Just over one third (38.8%) of participants reported access to a healthcare provider who treats them with dignity and respect. A similar percentage (35.6%) reported access to a healthcare provider who does not judge them. A total of 32.6% reported access to a healthcare provider with sufficient knowledge about the health needs of MSM. Just over one third (36.8%) reported access to a healthcare provider who maintains the confidentiality of their patients. The same percentage of participants reported access to a provider with whom they feel comfortable talking about HIV/STI (36.8%), or talking about sexual behavior (36.9%). An aggregate measure was created to capture access to a healthcare provider with at least one of these characteristics. Slightly less than half of participants (48.9%) reported access to provider with at least one supportive characteristic for providing services to MSM and TW populations.

Table 20 **Access to a healthcare provider with characteristics that are supportive of MSM and TW among MSM and TW, San Salvador, El Salvador, 2011–2012**

Supportive characteristics	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Treats patient with respect and dignity	**41.2** (35.4–47.2)	**28.6** (20.9–38.8)	**38.8** (33.9–44.0)
Does not judge respondent negatively	**37.0** (31.4–43.1)	**30.3** (22.3–39.9)	**35.6** (30.6–40.8)
Has sufficient knowledge about health needs of MSM and TW	**33.4** (27.6–38.8)	**30.0** (22.6–41.5)	**32.6** (27.7–37.5)
Maintains the confidentiality of patients	**37.5** (31.7–43.5)	**34.2** (24.8–45.5)	**36.8** (31.5–42.0)
Maintains an environment in which the patient feels comfortable asking questions about HIV/STI	**37.1** (31.8–43.3)	**36.1** (26.3–47.6)	**36.8** (31.9–42.2)
Maintains an environment in which the patient feels comfortable asking questions about sexual behavior	**37.3** (32.2–43.6)	**36.1** (26.6–47.9)	**36.9** (32.3–42.5)
Access to a provider with at least one supportive characteristic	**50.9** (45.5–57.2)	**41.1** (31.1–53.4)	**48.9** (44.0–54.6)

Access to a provider with supportive characteristics for the provision of services to MSM and TW was an important determinant of health service utilization in the last 12 months (Table 21). The largest difference in percentage of participants who used health services in the last 12 months was for participants with access to a provider with sufficient knowledge about the health needs of MSM compared to participants without access to this type of provider (67.3% compared to 17.9%). Participants who reported access to a provider who treats them with dignity and respect were also more likely to use health services in the last 12 months compared to participants without this type of provider (57.8% compared to 13.1%). The same was true for access to a provider who does not judge the participant. More than half of participants (56.6%) with access to a provider who does not judge them used health service in the last 12 months compared to only 15.9% of participants without access to this type of provider. Participants with access to a provider who maintains patient confidentiality were more likely to use health services in the last 12 months (50.9%) compared to participants without access to a provider who maintains confidentiality (18.1%). Participants who felt comfortable talking to their provider about HIV/STI and sexual behavior were more likely to use health service in the last 12 months (51.1% for HIV/STI and 48.4% for sexual behavior) compared to those without access to this type of provider (18.0% for HIV/STI and 19.6% for sexual behavior).

The aggregate score of access to a provider with characteristics supportive of MSM and TW populations also demonstrated a statistically significant relationship to health service utilization. A total of 50.2% of participants with access to a provider with at least one supportive characteristic used health services in the last 12 months compared to only 11.4% of participants without access to this type of provider.

Table 21 **Association between access to a healthcare provider with characteristics that are supportive of MSM and TW and health service utilization in the last 12 months, among MSM and TW, San Salvador, El Salvador, 2011–2012**

Supportive characteristics		N	Weighted %	95% CI
Treats patient with respect and dignity	No Yes	367 300	13.1 57.8	8.5–17.2** 49.4–65.4
Does not judge respondent negatively	No Yes	391 278	15.9 56.6	11.4–21.0** 48.2–64.7
Has sufficient knowledge about health needs of MSM and TW	No Yes	409 260	17.9 67.3	12.7–23.1** 50.1–92.5
Maintains the confidentiality of patients	No Yes	373 296	18.1 50.9	12.6–23.3** 42.7–58.9
Maintains an environment in which the patient feels comfortable asking questions about HIV/STI	No Yes	386 283	18.0 51.1	12.6–23.5** 43.0–59.1
Maintains an environment in which the patient feels comfortable asking questions about sexual behavior	No Yes	380 289	19.6 48.4	14.0–25.2** 40.3–56.3
Access to a provider with at least one supportive characteristic	No Yes	306 363	11.4 50.2	6.8–16.2** 42.7–57.1

** Significant difference in point estimate with confidence interval set at 0.05

Participants were asked about experiences of discrimination when seeking health services (Table 22). Questions to measure experienced discrimination from a healthcare provider were adapted from measures of racial discrimination in the healthcare setting in the US [21–23], and based on consultation with MSM and TW civil society organizations during the development phase of the study protocol. Just over half of participants (55.4%) reported that when seeking health services, they had been treated with less respect by a healthcare provider because they were MSM or TW. This percentage was higher among TW (71.4%) compared to MSM (52.1%). A total of 59.3% reported that they had received poorer quality services because they were MSM or TW. TW were more likely to report receiving poorer quality services from healthcare providers due to their gender identity and orientation (76.4%) compared to MSM (56.1%). Almost two thirds (62.0%) reported that they had experienced discrimination from a healthcare provider because they were MSM or TW. TW were more likely to report discrimination from a healthcare provider than MSM (82.5% compared to 57.6%). Just more than half of participants (57.7%) reported being refused services because they were MSM or TW. Again, this percentage was higher among TW (74.3%) compared to MSM (55.2%). Just more than half of all participants (58.8%) reported that they felt they needed to act more masculine or pretend that they were heterosexual when seeking health services. This percentage was higher among TW (69.4%) compared to MSM (55.3%). An aggregate measure of experienced discrimination was developed based on these items, and split at the median to develop high and low categories. A larger percentage of TW reported experiencing high levels of provider discrimination (65.7%) compared to MSM (41.0%).

Table 22 **Reported experienced discrimination from a healthcare provider among MSM and TW, San Salvador, El Salvador, 2011–2012**

Type of discrimination	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Treated with less respect by provider because MSM or TW	**52.1** (46.2–57.5)	**71.4** (61.0–80.3)**	**55.4** (50.5–60.3)
Received poorer quality service than others because MSM or TW	**56.1** (50.8–61.6)	**76.4** (66.0–83.9)**	**59.3** (54.7–64.1)
Experienced discrimination by provider because MSM or TW	**57.6** (52.0–63.3)	**82.5** (74.0–89.3)**	**62.0** (57.2–66.7)
Been refused service by provider because MSM or TW	**55.2** (49.5–60.8)	**74.3** (64.1–82.8)**	**57.7** (52.7–62.5)
Needed to act more masculine or tell health care provider he is heterosexual	**55.3** (50.7–60.1)	**69.4** (60.4–77.0)*	**58.8** (53.8–63.8)
Experienced high levels of discrimination by a health care provider	**41.0** (35.0–57.2)	**65.7** (55.3–75.7)**	**45.6** (41.4–50.2)

* Significant difference in point estimate with confidence interval set at 0.10
** Significant difference in point estimate with confidence interval set at 0.05

In Table 23, the relationship between reported experienced discrimination by a healthcare provider and health service utilization in the last 12 months is presented. Overall, there was not a significant difference between experienced discrimination and health service utilization in the last 12 months for individual items. Between 26.5%-29.2% of participants used health services when they reported having experienced discrimination including: being treated with disrespect, receipt of poorer quality services, discrimination, refusal of services, or perceived the need to act masculine or pretend to be heterosexual. This is in contrast to between 31.6–35.5% of participants who used health services in the last 12 months, who did not experience these same forms of discrimination.

While individual items did not display a significant association with health service utilization in the last 12 months, a cumulative measure of reported experienced discrimination was an important determinant of this behavior. Only 20.6% of participants who reported a high level of experienced discrimination used health services in the last 12 months compared to 37.2% of participants who reported a low level of experienced discrimination.

Table 23 **Association between experienced discrimination and use of health services in the last 12 months, among MSM and TW, San Salvador, El Salvador, 2011–2012**

Type of discrimination		Used healthcare services in the last 12 months		
		N	Weighted %	95% CI
Treated with less respect by provider because MSM or TW	No	309	33.2	25.8–39.7
	Yes	356	27.2	20.4–37.6
Received poorer quality service than others because MSM or TW	No	288	34.6	27.7–42.3
	Yes	376	27.0	21.1–33.7
Experienced discrimination by provider because MSM or TW	No	257	31.6	24.8–39.4
	Yes	410	29.2	23.1–35.9
Been refused service by provider because MSM or TW	No	297	32.0	25.0–39.0
	Yes	364	27.9	21.7–34.5
Needed to act more masculine or tell health care provider he is heterosexual	No	276	35.5	27.8–43.5
	Yes	388	26.5	20.9–32.2
Experienced high levels of discrimination by a health care provider	No	378	37.2	30.8–43.8**
	Yes	275	20.6	14.9–28.7

** Significant difference in point estimate with confidence interval set at 0.05

In addition to regular source of care, health insurance, access to an MSM supportive provider, and experienced discrimination, select variables from Chapters 3 and 4 specifically relevant to health seeking behavior were analyzed in relation to health service utilization in the last 12 months. Selected variables demonstrating a statistically significant association with health service utilization in bivariate and multivariate analysis are presented in Table 24.

Economic vulnerability was an important determinant of health service utilization in the last 12 months. Only 4.5% of participants who earned no income used health services in the last 12 months compared to 41.6% of participants earning between US$1–249 per month, and 38.3% of participants earning more than US$250 per month who used health services.

Participants who earned no monthly income were less likely to use health services in the last 12 months compared to those who earned any income.

Participants who experienced abuse or maltreatment in the last 12 months because of their sexual orientation were more likely to use health services. Almost two thirds of participants (63.3%) who experienced abuse or maltreatment in the last 12 months also used health service in the same time period, compared to only 21.1% who did not experience abuse or maltreatment. This finding is challenging to interpret, in part because of the cross sectional nature of the data. One possibility is that participants who reported abuse or maltreatment in the last 12 months, may have also been more likely to experience discrimination in the healthcare setting during this same time period. Active disclosure of sexual behavior with men or TW was also an important determinant of health service utilization. Almost half of participants (44.0%) who had disclosed to family members that they had sex with men or TW used health services in the last 12 months, compared to only 14.7% of participants who had not disclosed this to family members. Three quarters of participants (74.6%) who had disclosed to a healthcare provider that they have sex with men or TW used health services in the last 12 months, compared to only 26.7% of participants who had not disclosed this to a healthcare provider.

Use of health services in the last 12 months was higher among participants who had disclosed their sexual orientation with a family member compared to those who had not disclosed (44.0% compared to 14.7%), and among participants who had disclosed their sexual orientation to a healthcare provider (74.6% compared to 26.7%).

No association was found between gender identity and sexual orientation and health service utilization in the last 12 months.

Table 24 **Association between select[9] socio-demographic and other variables and health service utilization in the last 12 months among MSM and TW, San Salvador, El Salvador, 2011–2012**

	Used healthcare services in the last 12 months		
	N	Weighted %	95% CI
Monthly income			
No income	141	4.5	1.6–8.1**
US$1–249	288	41.6	34.0–49.4
≥ US$250	240	38.3	29.3–47.7
Victim of abuse or maltreatment because of sexual orientation in the last 12 months			
No	483	21.1	16.4–25.9**
Yes	185	63.3	53.0–72.5
Disclosed sexual orientation or identity to any family member			
No	271	14.7	9.6–20.0**
Yes	398	44.2	37.2–51.2
Disclosed sexual orientation or identity to healthcare provider			
No	603	26.7	22.2–31.6**
Yes	66	74.6	59.5–86.7

** Significant difference in point estimate with confidence interval set at 0.05

[9] The variables in Table 24 were included in a multivariate regression model that also included the other variables from this chapter associated with health service utilization in the last 12 months in bivariate analysis (regular source of care, health insurance, experienced healthcare provider discrimination scale, access to a provider supportive of MSM and TW scale), and select variables from Chapters 3 and 4 that were significant in bivariate analysis or theoretically important (sexual orientation and identity, age, education, current stable relationship with man or TW, survivor of sexual assault ever, sex work in the last 12 months, client of sex work last 12 months, lifetime number of sexual partners, contemplation of suicide, self-reported health status). These other variables from Chapters 3 and 4 are not presented because they were not statistically significant in the adjusted multivariate model. All variables presented in tables and noted as associated with health service utilization in bivariate analysis in this chapter remained statistically significant in the multivariate model.

5.4 CHAPTER 5 SUMMARY

Health service preferences

- Early hours of operation are preferred for health services (7:00–11:59 AM).
- In terms of type of facility, a private hospital or clinic is preferred, followed by a hospital or clinic operated by MINSAL. TW were more likely to prefer a MINSAL hospital or clinic, while MSM were more likely to prefer a private hospital, clinic, or provider.
- A doctor who is a general practitioner is the preferred type of medical provider.
- Approximately a third of participants preferred a specialist as their type of medical provider. Among these participants, TW preferred a proctologist, endocrinologist, or gynecologist, while MSM preferred an urologist, proctologist, or infectious disease specialist.
- A person who is a sexual minority is preferred for the provision of medical services.
- There is a strong preference for providers and facilities that specialize in the specific health needs of TW and MSM. The main reason for this preference is the perceived increased technical skill of the provider in meeting the health needs of MSM and TW, followed by an increased sense of trust. For the minority who did not want this type of provider, most were concerned that this specialized service might inadvertently reveal their sexual orientation to family, or that it was not necessary.

Health service utilization

- Approximately 30.2% of participants used health services in the last 12 months. Most went to a MINSAL hospital or clinic. TW were more likely than MSM to receive care at a MINSAL hospital or clinic, while MSM were more likely than TW to have received care at a private hospital, clinic, or provider.
- Most people who reported needing care received it in the last 12 months. However, about half of those who needed and received care, postponed care before seeking it, did not get all the medicine they were prescribed, did not complete the treatment plan, or did not complete all follow-up visits.

Determinants of health service utilization in the last 12 months

- Few MSM and TW report having health insurance (22.2%) or a regular healthcare provider (24.3%) or facility (30.1%) where they can seek care. Persons without health insurance or a regular health provider or facility were less likely to use services in the last 12 months than persons with those resources.
- Participants with access to a health provider with characteristics supportive of MSM and TW were more likely to use health services in the last 12 months compared to participants without access to a provider with these characteristics.
- More than half of participants reported experiencing discrimination from a healthcare provider. TW were more likely than MSM to report having experienced discrimination from a healthcare provider. Persons who reported experiencing a high level of discrimination from a healthcare provider were less likely to have used health services in the last 12 months compared to persons who reported experiencing a low level of discrimination.
- Those without any monthly income were less likely to use health services in the last 12 months compared to participants with some monthly income.
- Persons who had experienced abuse or maltreatment due to their sexual orientation in the last 12 months were more likely to have used health services in the last 12 months compared to those who had not experienced abuse or maltreatment.
- Participants who had not disclosed their sexual orientation to a family member or to a healthcare provider were less likely to use health services in the last 12 months compared to those who had disclosed.

Chapter 6 HIV Service Utilization: Preferences, Frequency, and Correlates

6.1 HIV SERVICE USE AND PREFERENCES

In this chapter, information on the use of HIV-related health services including HIV testing uptake, preferences for HIV testing, and determinants of HIV testing among MSM and TW are presented. Frequencies are presented for descriptive characteristics for the total sample, and disaggregated for MSM and TW groups. Statistically significant differences between these groups are noted in the text based on point estimates and 90% and 95% confidence intervals. Selected characteristics from this Chapter and Chapters 3 and 4, relevant to the decision to test for HIV, were analyzed in relation to the outcomes of HIV testing ever and in the last 12 months. Factors demonstrating a statistically significant association with HIV testing in bivariate and multivariate models are presented.

In Table 25, HIV prevention services received by study participants in the last 12 months are presented. Almost all participants (91.9%) received free condoms in the last 12 months. More than half of the participants (57.5%) received free lubricant. Slightly less than half of the participants (43.9%) received HIV prevention education materials. One in five participants (18.1%) received a referral for an HIV test. Referral services for an STI were received by only 6.4% of the participants. A total of 1.8% of the participants reported using the SIDATEL HIV/AIDS phone helpline. Overall, 16.3% of participants reported using the internet to find information about HIV/STI or sexual health. A smaller percentage of TW (7.7%) compared to MSM (18.2%) accessed information about HIV/STI or sexual health via the internet. The median number of educational activities attended in the last 12 months about HIV/STI or sexual health was 2 (range 0–100). Nearly two thirds of participants (62.1%) attended at least one educational activity about HIV/STI or sexual health. The percent of TW attending education activities about HIV/STI or sexual health was higher compared to MSM (76.8% among TW compared to 58.9% among MSM).

A total of 16.3% of participants used the internet to find information on HIV/STI or sexual health. MSM were more likely than TW to access information about HIV through the internet, while TW were more likely than MSM to have attended an HIV education session in the last 12 months.

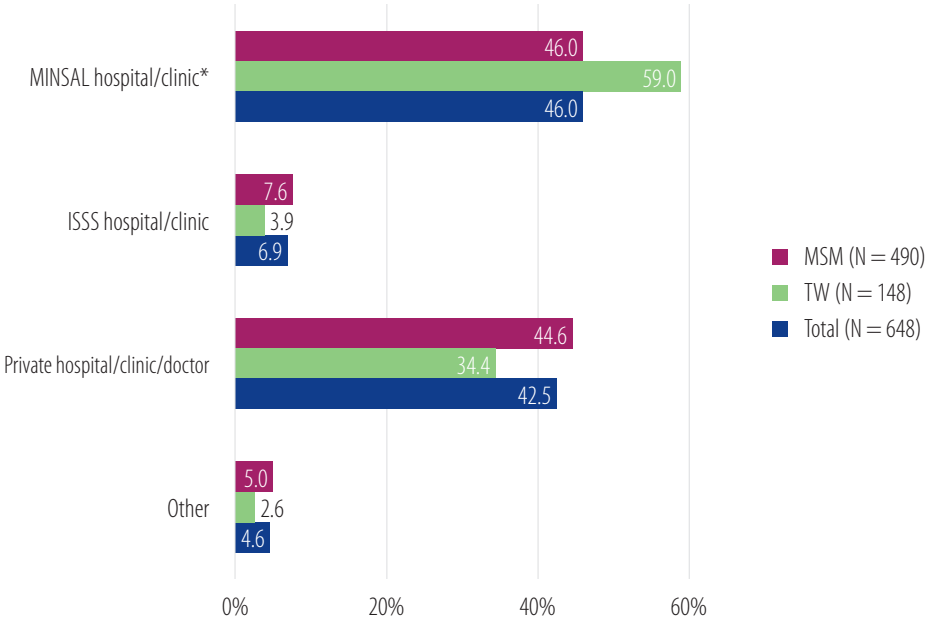
Table 25 HIV prevention services received in the last 12 months among MSM and TW, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 490)	TW (N = 158)	Total (N = 648)
Prevention services received			
Free condoms	**90.6** (86.4–94.3)	**96.8** (92.9–100.0	**91.9** (88.3–95.1)
Free lubricant	**55.9** (50.0–62.2)	**64.6** (53.0–77.7)	**57.5** (52.5–63.3)
HIV prevention education materials	**41.9** (35.8–47.8)	**51.7** (40.4–63.4)	**43.9** (38.5–49.3)
HIV test referral	**18.2** (13.4–23.6)	**19.3** (11.1–29.3)	**18.1** (14.2–23.1)
Referral for an STI	**5.5** (3.4–8.0)	**9.8** (3.8–18.4)	**6.4** (4.2–8.9)
SIDATEL phone helpline	**1.5** (0.0–3.0)	**4.6** (0.0–10.6)	**1.8** (0.5–3.5)
Internet			
Used the internet to obtain information about sexual health, HIV/STI	**18.2** (13.8–22.3)	**7.7** (3.2–13.0)**	**16.3** (12.6–19.8)
Educational activities			
Number of education al activities about sexual health or HIV/STI attended (range)	**1** (0–100)	**3** (0–100)	**2** (0–100)
Attended at least 1 activity	**58.9** (52.1–64.6)	**76.8** (65.9–86.1)**	**62.1** (56.2–67.5)

** Significant difference in point estimate with confidence interval set at 0.05

Participants were asked to report their preference for type of health center when in need of services related to HIV/STI. Most participants preferred a MINSAL hospital or clinic (46.0%), followed by a private hospital or clinic (42.5%). Only 6.9% preferred an ISSS hospital or clinic. A larger percentage of TW preferred a MINSAL hospital or clinic compared to MSM (59.0% among TW compared to 46.0% among MSM) (Figure 12).

Figure 12 **Preferred type of health center for HIV/STI specific health services among MSM and TW, San Salvador, El Salvador, 2011–2012**



* Significant difference in point estimate with confidence interval set at 0.10

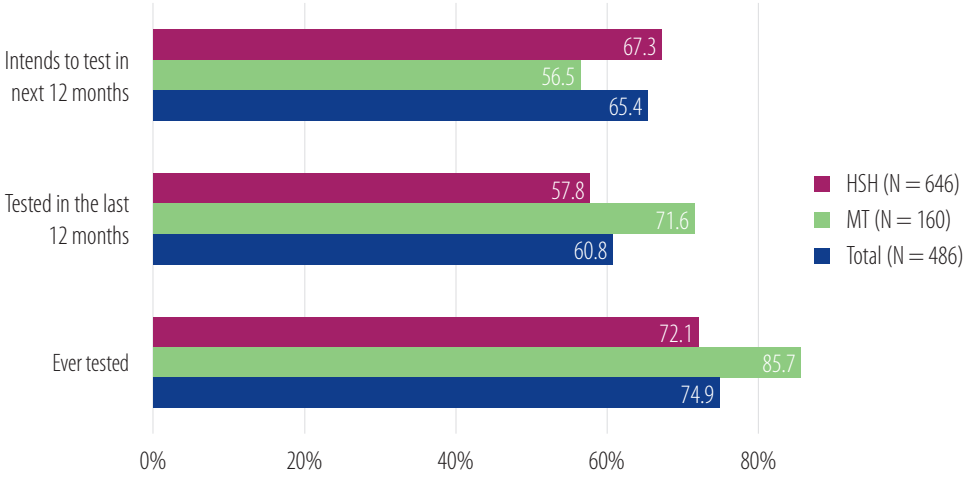
Most participants (60.3%) preferred to see a general practitioner for HIV/STI related services. Just over one third of participants (39.4%) preferred a specialist for these types of services. For both MSM and TW, the preferred type of specialist for HIV/STI services was an infectious disease specialist (89.8% for MSM and 88.7% for TW). In terms of the gender identity and sexual orientation of the service provider, 40.9% of participants preferred a sexual minority (someone who is gay, bisexual, TW) when seeking HIV/STI related services. This was followed by a preference for a woman (23.1%), or a man (14.6%) (Table 26).

Table 26 **Provider-related preferences for HIV/STI specific services among MSM and TW, San Salvador, El Salvador, 2011–2012**

	Weighted % (95% CI)		
	MSM (N = 488)	TW (N = 156)	Total (N = 644)
Preferred type of health care provider			
Specialist	**41.5** (36.0–48.5)	**30.8** (19.6–43.3)	**39.4** (34.3–45.6)
General practitioner	**58.5** (51.5–64.0)	**69.2** (56.7–80.4)	**60.3** (54.0–65.3)
Preferred type of specialist (among those preferring specialists)			
Infectious disease specialist	**89.8** (81.9–95.9)	**88.7** (73.2–97.8)	**89.6** (82.6–95.2)
Other/No preference	**10.2** (4.1–18.1)	**11.3** (2.2–26.8)	**10.4** (4.8–17.4)
Preferred gender identity/sexual orientation or provider			
Male	**14.5** (10.8–18.9)	**15.8** (8.6–25.8)	**14.6** (11.4–18.6)
Female	**22.4** (17.0–28.0)	**26.6** (15.5–37.5)	**23.1** (18.1–28.0)
A sexual minority (gay, bisexual, transgender)	**41.5** (35.7–47.1)	**37.8** (26.7–49.1)	**40.9** (35.7–46.0)
No preference	**21.6** (16.9–27.1)	**19.8** (11.1–29.3)	**21.4** (17.0–26.0)

The vast majority of participants (74.9%) had tested for HIV at least once in their life. Nearly two thirds of the participants (60.8%) tested for HIV in the last 12 months. A similar percentage (65.4%) intended to test for HIV in the next year (Figure 13).

Figure 13 **HIV testing behavior and intentions among MSM and TW, San Salvador, El Salvador, 2011–2012**



Participants who had tested for HIV in the last year were asked to evaluate the quality of HIV testing and counseling (HTC) services received the most recent time they had tested for HIV (Table 27). Items used to describe quality were drawn primarily from the World Health Organization tool for assessing HTC quality [24]. Overall, participants reported a high level of quality for HTC services. Over 75% of participants reported that the provider explained that results were confidential, the possible results of the test, and how HIV/STI are transmitted and prevented. A total of 75% or more also felt the provider treated them with dignity and respect, that they had enough privacy during the counseling session, that the healthcare provider, security guard, administrative personnel, and other patients did not discriminate against them, and that the provider maintained confidentiality. Between 61.3–74.9% reported that the provider gave them condoms, that the provider did not judge them negatively, that the provider had sufficient knowledge about HIV testing and the health needs of MSM and TW, and felt comfortable asking the provider questions about HIV/STI and sexual behavior. The majority of participants (82.7%) also stated that they would recommend the provider to other MSM and TW.

In several cases the percentages reporting aspects of quality differed between MSM and TW. TW were more likely to receive condoms (85.9%) than MSM (63.6%) the last time they tested for HIV. MSM were less likely to report experiencing discrimination when testing for HIV compared to TW. A total of 86.4% of MSM reported that the health center staff including security guards, receptionists and other administrators did not discriminate against them compared to only 55.5% of TW. Similarly, a total of 88.5% of MSM reported that other patients did not discriminate against them when seeking HIV testing services compared to 70.4% of TW.

Table 27 **Experience receiving HIV testing services during most recent consultation in the last 12 months among MSM and TW, San Salvador, El Salvador, 2011–2012**

	Weighted % (95% CI)		
	MSM (N = 309)	TW (N = 124)	Total (N = 433)
The provider explained that the results were confidential	**92.2** (88.5–95.4)	**94.0** (83.9–99.6)	**91.9** (88.4–95.1)
The provider explained the possible results of the diagnostic test	**92.3** (88.0–96.4)	**92.8** (81.8–99.5)	**91.5** (87.8–94.7)
The provider explained how HIV or STI are transmitted and prevented	**80.2** (75.7–87.9)	**90.6** (79.1–98.2)	**86.5** (81.5–91.4)
The provider gave you condoms	**63.6** (50.9–69.6)	**85.9** (73.4–94.2)**	**67.7** (62.2–74.5)
You had sufficient privacy during the consultation	**72.4** (62.9–79.6)	**88.1** (78.4–98.0)	**75.9** (70.4–81.7)
The provider treated you with dignity and respect	**82.6** (72.8–88.5)	**86.2** (73.8–96.9)	**83.3** (77.6–88.5)
The provider did not judge you negatively	**67.7** (63.9–79.4)	**58.6** (40.0–69.1)	**65.7** (58.6–71.6)
The healthcare providers such as doctors and nurses, did not discriminate against you	**81.1** (79.1–89.2)	**60.2** (41.5–70.6)**	**77.1** (70.9–81.9)
The health center staff such as the security guard, receptionist or administrator, did not discriminate against you	**86.4** (833.3–91.9)	**55.5** (36.0–66.8)**	**79.1** (73.5–84.0)
The other patients did not discriminate against you	**88.5** (86.7–94.2)	**70.4** (51.3–80.9)**	**85.5** (80.5–89.3)
The provider had sufficient knowledge about HIV testing	**59.6** (48.8–66.0)	**71.9** (59.0–84.4)	**61.3** (55.5–68.3)
The provider had sufficient information about the health needs of MSM or TW	**58.6** (48.5–66.8)	**74.7** (62.5–86.3)	**63.3** (57.2–70.0)
The provider dedicated the appropriate amount of time to your consultation	**70.2** (62.2–78.3)	**72.6** (57.0–85.4)	**71.4** (65.3–77.1)
The provider maintained confidentiality	**78.2** (70.1–85.6)	**79.0** (64.2–90.8)	**78.3** (72.5–83.6)
You felt comfortable asking the provider questions about HIV or STI	**73.7** (65.9–80.8)	**73.2** (56.3–85.4)	**74.3** (68.3–79.9)
You felt comfortable asking the provider questions about sexual behavior	**73.1** (63.8–79.2)	**74.3** (56.1–85.2)	**72.6** (67.2–78.7)
You would recommend this provider to other MSM or TW	**83.9** (75.3–89.8)	**80.0** (62.6–90.6)	**82.7** (77.7–88.0)

** Significant difference in point estimate with confidence interval set at 0.05

As noted in Figure 13, approximately 39.2% of participants had not tested for HIV in the last 12 months. Participants who had not tested in the last 12 months were asked to respond to a series of questions that included potential reasons for not having tested for HIV in the last 12 months. The most common reason for not testing for HIV in the last 12 months was due to concerns about confidentiality (reported by 46.9% of the participants who had not tested in the last 12 months). After confidentiality, the most common reasons for not testing included long wait time to receive the results (42.4%), belief that the provider would judge them (40.4%), not wanting others to find out sexual orientation (40.3%), and fear of receiving the test result (38.2%) (Table 28). There was not a statistically significant difference in reasons for not testing between MSM and TW.

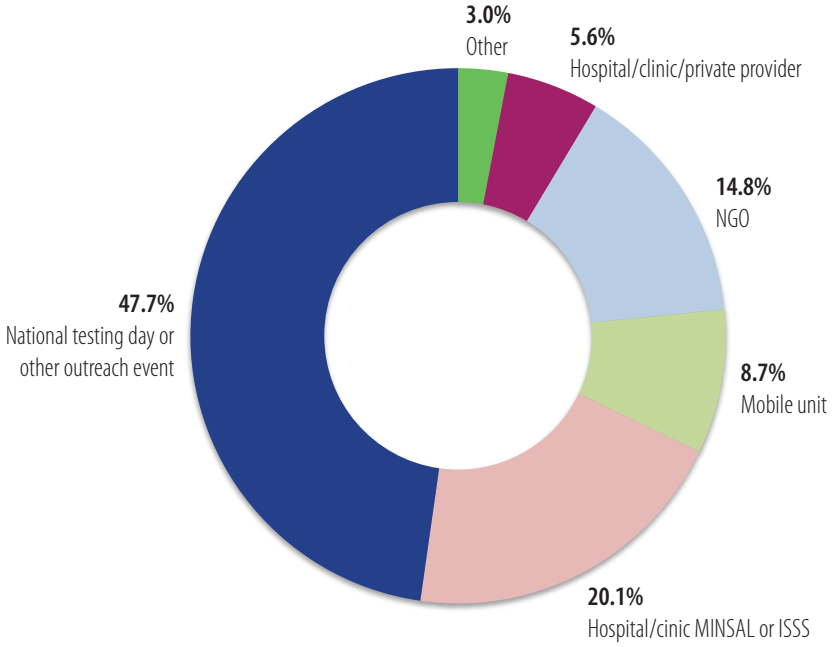
Among participants who had not tested for HIV in the last 12 months, the most common reasons for not testing were concern about confidentiality, a long wait time to receive the test results, fear of judgment by the provider, fear that testing would inadvertently reveal their sexual orientation, and fear of the HIV test result.

Table 28 **Reasons that influenced decision to not test for HIV in the last 12 months, among MSM and TW, San Salvador, El Salvador, 2011–2012**

	Weighted % (95% CI)		
	MSM (N = 182)	TW (N = 38)	Total (N = 220)
Worried about a lack of confidentiality	**46.8** (37.4–55.9)	**49.8** (26.8–71.6)	**46.9** (37.8–55.4)
Believed that provider would judge him/her	**40.0** (31.0–48.6)	**48.8** (26.4–70.6)	**40.4** (32.1–48.9)
Did not want others to find out about sexual orientation	**40.9** (32.2–49.9)	**40.1** (18.1–62.4)	**40.3** (32.0–48.7)
Long wait times to receive care	**41.6** (33.4–49.9)	**53.7** (30.7–75.1)	**42.4** (34.2–50.5)
Feared discrimination from the other patients	**36.1** (27.7–45.0)	**40.7** (19.7–64.5)	**36.3** (28.1–44.9)
There was no provider with sufficient knowledge to perform the HIV test	**35.0** (26.9–44.2)	**39.8** (17.9–61.9)	**35.2** (26.9–43.5)
There was no provider with whom s/he felt comfortable talking about HIV	**32.3** (23.7–40.9)	**38.1** (16.6–60.8)	**32.5** (24.3–40.9)
Too embarrassed to do an HIV test	**34.4** (25.6–43.6)	**40.6** (19.1–61.7)	**35.2** (26.7–43.2)
There was no place with quality equipment, medical supplies or medicine to do the HIV test	**29.4** (21.0–37.3)	**43.4** (21.7–65.1)	**30.9** (22.7–38.5)
Did not want to receive counseling about his/her risk to become infected with HIV	**29.3** (21.8–37.7)	**39.4** (18.0–61.6)	**30.5** (23.0–38.5)
Did not know where to go for the HIV test	**28.9** (21.1–37.4)	**41.7** (20.1–64.4)	**30.3** (22.6–38.7)
Afraid to receive the results of the HIV test	**35.9** (26.5–45.5)	**54.3** (32.9–76.5)	**38.2** (29.4–47.1)
The provider was far away	**27.1** (19.3–35.2)	**40.6** (18.3–63.4)	**28.6** (21.2–36.6)
Could not go to provider during hours of attention	**30.3** (22.4–39.0)	**41.6** (20.1–64.0)	**31.9** (24.1–40.1)
Did not have enough money to do an HIV test	**29.0** (20.8–37.5)	**39.3** (17.3–62.3)	**30.5** (22.5–38.7)
Feared discrimination from healthcare provider (doctor, nurses, technicians)	**33.8** (25.8–43.0)	**24.0** (9.5–44.0)	**32.5** (25.0–40.8)
Feared discrimination from health facility staff	**32.0** (23.9–41.1)	**44.8** (23.3–69.1)	**33.2** (25.3–42.1)
Feared sexual abuse from health center staff	**22.3** (14.7–29.9)	**27.3** (8.8–49.7)	**22.5** (15.1–30.0)

Participants who tested for HIV in the last 12 months were asked the location and type of venue where they most recently tested for HIV. Almost half of the participants (47.7%) tested at a national HIV testing day or other similar event. One in five participants (20.1%) tested at a MINSAL or ISSS hospital or clinic the last time they tested in the last 12 months. Fewer participants tested at a non-governmental organization (NGO) (14.8%), followed by a mobile unit (8.7%), or private hospital, clinic, or provider (5.6%) (Figure 14).

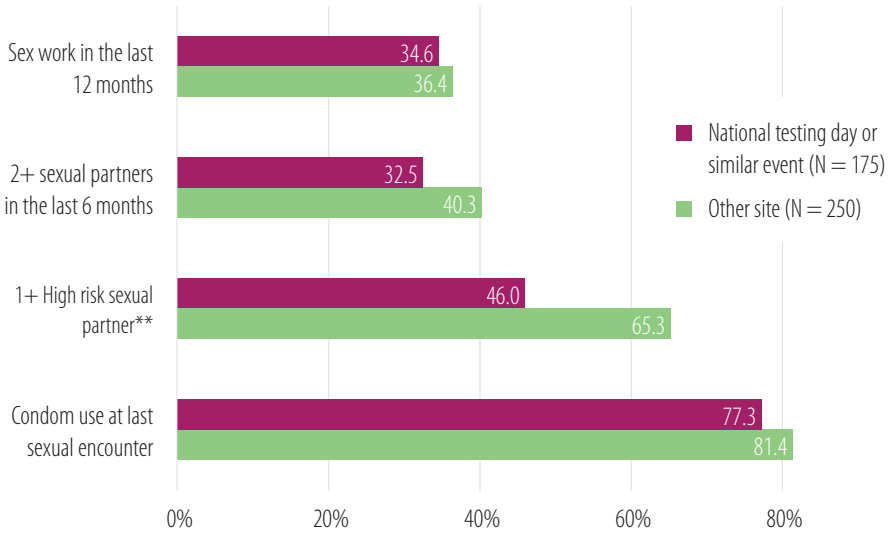
Figure 14 **Location of HIV testing the most recent time tested in the last 12 among MSM and TW, San Salvador, El Salvador, 2011–2012†**



† N = 426 participants who tested for HIV in the last 12 months

In addition to the percentage of participants testing at different locations, the HIV-related risk characteristics of participants testing at different locations was also assessed. The purpose of analyzing the data in this way was to provide information to target testing services towards persons who are at highest risk for HIV. Due to low numbers in each category, we combined MINSAL or ISSS hospital or clinic, NGO, mobile unit, and private hospital, clinic, or provider into one group, and compared select sexual and drug use behaviors across this group and those who tested at a national testing day or similar event. There was no statistically significant difference for most risk behaviors. The one exception was that, persons testing at national testing day or similar events were less likely to report having at least one high risk sexual partner (46.0%) compared to participants testing at other sites (65.3%) (Figure 15).

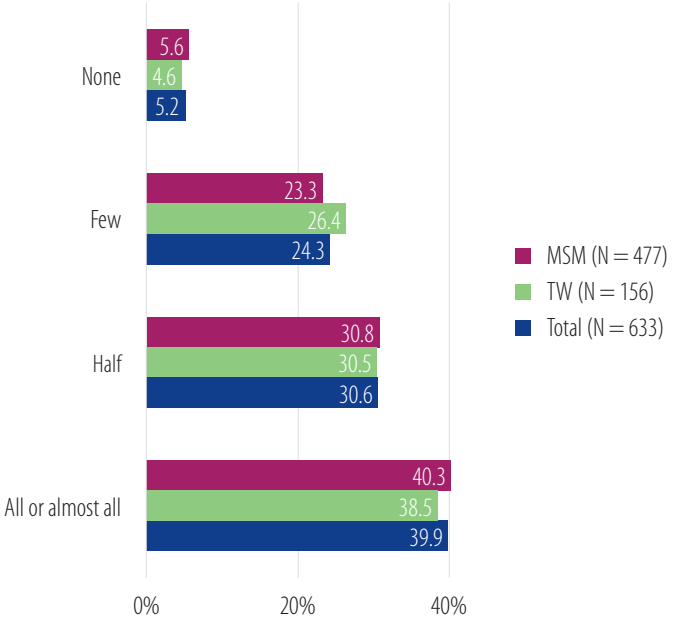
Figure 15 **Sexual risk behavior reported by participants by testing location among MSM and TW, San Salvador, El Salvador, 2011–2012 (National testing day or similar event compared to other sites)**



** Significant difference in point estimate with confidence interval set at 0.05

Participants were also asked about the number of their social acquaintances they believed had tested for HIV. A total of 40.0% of participants thought that all or almost all of the people that they know had tested for HIV. A fewer percentage thought that only half the people they know had tested (30.6%), that few people they know had tested (24.3%) or that none of the people they know had tested (5.2%) (Figure 16).

Figure 16 **Participant's perception of the quantity of their social relations who have ever been tested for HIV among MSM and TW, San Salvador, El Salvador, 2011–2012**



In Table 29, information on the determinants of HIV testing ever and in the last 12 months is presented. Variables explored in relation to these outcomes include select socio-demographic, and HIV-related risk behavior variables in Chapters 3 and 4 and descriptive characteristics presented in this chapter (Table 29).[10]

6.2 DETERMINANTS OF HIV TESTING EVER

Ever testing for HIV was more likely among participants who were older compared to participants who were younger (68.0% to 87.9%). Ever testing for HIV was also more likely among participants with more than 16 lifetime sexual partners compared to persons with 15 or less lifetime sexual partners (82.1% compared to 68.1%). Persons with a high level of perceived risk for HIV were more likely to have ever tested for HIV compared to persons with a low perceived risk for HIV (84.5% compared to 71.5%). Survivors of sexual assault were more likely to have ever tested for HIV compared to persons who had not experienced sexual assault (88.8% compared to 70.1%). Social acquaintances were an important determinant of having ever tested for HIV. Participants who reported that more than half of their social acquaintances had tested for HIV were more likely to have ever tested compared to persons who thought fewer of their social acquaintances had tested (79.9% compared to 61.7%). Similarly, participants who know a PLHIV were more likely to have ever tested for HIV compared to participants who did not know a PLHIV (82.5% compared to 64.8%). Participants who had disclosed their sexual orientation to a family member were more likely to have ever tested for HIV compared to those who had not disclosed (81.5% compared to 66.9%). Finally, among MSM, internalized homonegativity was associated with having ever tested for HIV. MSM with a high level of internalized homonegativity were less likely to have ever tested for HIV compared to MSM with a low level of internalized homonegativity (79.3% compared to 62.8%).[11]

6.3 DETERMINANTS OF HIV TESTING IN THE LAST 12 MONTHS

HIV testing in the last 12 months was more likely among participants in the older age group compared to participants in the younger age group (70.1% compared to 56.4%). Survivors of sexual assault were more likely to have tested for HIV in the last 12 months compared to persons who had not experienced sexual assault (72.2% compared to 57.7%). Participants who had disclosed to a family member that they form sexual relationships with men or TW were more likely to have tested for HIV in the last 12 months compared to participants who had not disclosed (67.7% compared to 52.7%).

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[10] Variables included in the multivariate model to check bivariate associations include all those presented in Table 29 as well as monthly income and education as control variables. These variables include all those significant in bivariate analysis for having ever tested for HIV or having tested in the last 12 months. Only those associations remaining significant in the multivariate model are noted in the text.

[11] Internalized homonegativity was measured only among self-identified men. Therefore the multivariate model that included this variable excludes all TW from the analysis. In this multivariate model, internalized homonegativity was significantly associated with having ever tested for HIV. However, out of the other variables in Table 29 only age and knowing people who had tested for HIV remained significantly associated with having ever tested for HIV when this variable was introduced. This variable was not included in the multivariate model for HIV testing in the last 12 months because it was not related to this outcome in bivariate analysis, and rendered all associations between variables and the outcome insignificant when included in the model.

There was no difference in testing uptake ever or in the last 12 months based on sexual orientation and gender identity, nor on HIV risk behaviors including having multiple sexual partners in the last six months, sex work, condom use at last sex, use of drugs during last three sexual encounters, use of illicit drugs in the last 30 days, nor having one or more high risk sex partners in the last six months. Psychosocial constructs including male role attitudes and social support were also not associated with HIV testing ever or in the last 12 months.

Table 29 Determinants of HIV testing ever and in the last 12 months among MSM, San Salvador, El Salvador, 2011–2012

		Ever tested for HIV		Tested for HIV in the last 12 months	
	N	Weighted %	95% CI	Weighted %	95% CI
Age					
18–24	409	68.0	62.0–74.3**	56.4	50.4–62.1*
25–65	237	87.9	82.6–93.3	70.1	62.5–76.9
Number of lifetime sex partners					
≤15 sexual partners	333	68.1	61.5–74.5**	55.9	47.8–62.3
≥16 sexual partners	313	82.1	77.4–88.8	66.7	59.1–74.2
Perceived risk for HIV					
Low	437	71.5	65.8–76.0*	60.7	53.4–67.0
High	181	84.5	78.2–90.3	68.2	58.6–76.2
Survivor of sexual assault					
No	475	70.1	64.2–75.8**	57.7	52.2–62.8*
Yes	170	88.8	82.2–95.2	72.2	63.6–80.3
At least half of people they know have tested for HIV					
No	149	61.7	50.3–71.9**	52.8	40.2–63.0
Yes	484	79.9	75.7–85.4	66.5	59.6–72.8
Knows someone who is HIV positive					
No	211	64.8	55.6–72.7**	53.2	43.2–61.7
Yes	425	82.5	76.8–87.7	66.3	58.4–72.4
Disclosed sexual orientation to a family member					
No	256	66.9	58.7–73.9**	52.7	45.8–58.7*
Yes	390	81.5	76.3–86.4	67.7	61.1–73.2
Internalized homonegativity					
Low	236	79.3	71.5–85.5*	62.1	50.0–70.3
High	222	62.8	51.6–68.8	50.0	38.7–58.6

* Significant difference in point estimate with confidence interval set at 0.10
** Significant difference in point estimate with confidence interval set at 0.05

6.4 CHAPTER 6 SUMMARY

HIV/STI service utilization and preferences

- Almost all MSM and TW report receiving free condoms in the last year, and approximately half received free lubricant and HIV prevention educational materials. Few received a referral for an HIV test or for an STI.
- Most prefer to receive HIV-related services from a general practitioner. Among the minority who prefer to receive these services from a specialist, most preferred a provider who specializes in infectious disease.
- A provider who is also a sexual minority is preferred for HIV/STI related services.
- A MINSAL hospital or clinic is the preferred type of health facility for services related specifically to HIV/STI.
- A total of 16.3% of participants accessed information about HIV/STI or sexual health via the internet in the last year. MSM were more likely than TW to access information about sexual health or HIV/STI from the internet, while TW were more likely than MSM to attend an HIV educational activity in the last 12 months.

HIV testing services

- Almost all MSM and TW had tested for HIV at least once in their life (74.9%). More than half had tested for HIV in the last 12 months (60.8%) or intended to test for HIV in the next 12 months (65.4%).
- Most participants reported receiving high quality HIV testing services, based on WHO guidelines for HIV testing and counseling. Some areas for improvement include condom distribution, provider judgment of the client, and provider knowledge about HIV testing and the health needs of MSM and TW. MSM were less likely to receive free condoms when testing compared to TW. TW were more likely to report discrimination from health center staff and other patients compared to MSM when testing for HIV.
- Among persons who had not tested for HIV in the last 12 months, common reasons for not testing included concerns about confidentiality, long wait time to receive results, fear of provider judgment, fear of unintended disclosure of sexual orientation, and fear of the test result.
- Most MSM and TW who tested in the last 12 months, tested at a National HIV testing day event or other similar activity. The only observed difference between people testing at a National HIV testing day or other similar event compared to other locations (for example, a MINSAL/ISSS hospital or clinic, private hospital, clinic or provider, mobile unit, NGO) was that persons testing at a National HIV testing day event or similar activity were less likely to report having a high risk sexual partner in the last six months.

Determinants of HIV testing

- Persons who reported testing for HIV ever in their life were more likely to be older, have 16 or more lifetime sexual partners, have a high level of perceived risk for HIV, be survivors of sexual assault, report that more than half their social acquaintances have tested for HIV, and report knowing a PLHIV. Among MSM, participants with high internalized homonegativity were less likely to have ever tested for HIV.
- Participants who reported HIV testing in the last 12 months were more likely to be older, be survivors of sexual assault, and to have disclosed their sexual orientation to a family member.
- There was no difference in testing for HIV ever or in the last 12 months based on sexual orientation and identity, nor HIV-related risk behavior.

Recommendations

The findings of this investigation complement existing data from El Salvador and the Central American region on the increased vulnerability to HIV and STI for MSM and TW, including reported experiences of discrimination in the healthcare setting. This study provides additional evidence in several important ways. First, inclusion of a TW as a seed in the initial recruitment, and phrasing of questions including eligibility criteria to include both MSM and TW, resulted in a larger percentage of TW as part of the study population compared to previous RDS studies in this context. A total of 18.1% of study participants were TW, allowing for the disaggregation of information by MSM and TW for univariate analysis, and the ability to capture some differences across MSM and TW in bivariate analysis. Second, the design of the questionnaire was based on a social determinants approach to health for sexual minorities [2]. This approach led to the inclusion of variables related to the lived experience of MSM and TW in a heterosexual-dominant context that may influence health seeking behavior in addition to traditional measures of health system factors. In this way, we were able to operationalize how experiences of stigma and discrimination in the social environment and fear of disclosure are related to health seeking behavior, in addition to documenting client experiences that influence this behavior once "in the door" of the health system.

Summary of key findings are included in each chapter. The following policy and programmatic recommendations are based on these findings.

INCREASED SUPPORT FOR DISCLOSURE OF GENDER IDENTITY AND SEXUAL ORIENTATION WITHIN FAMILIES AND IN HEALTHCARE SETTINGS

Recommendation

Support for the process of disclosure of sexual orientation should be provided to MSM and TW, and may take several forms. This should include counseling and intervention with MSM or TW through individual and group sessions, and the engagement family members in the process. This requires a deeper understanding of the perspective of family members in relation to sexual minorities, potential barriers to acceptance, and how to mitigate fears of their own stigmatization as a result of being associated with someone who is a sexual minority. Supporting individuals in the process of disclosure also requires an understanding of where individual MSM and TW are in their own process of self-acceptance, and an assessment of the safety of disclosure based on family and provider stage of readiness in accepting their relative or client.

While healthcare providers may certainly play a role in interventions to increase disclosure, there is also significant room for civil society and NGOs to address disclosure. Interventions should be based on evidence from other programs (for example, advocacy tools, curriculum and interventions from the organization Parents for Lesbians, Bisexuals, and Gays [PFLAG] based in the United States). It may also be important to provide NGOs with skills in counseling and social work so that they can mediate disclosure conversations between MSM and TW and their family or healthcare provider.

Findings that support this recommendation

One third of participants (35.0%) had never disclosed that they form sexual relationships with men or TW to another person. Approximately half (52.9%) had disclosed their sexual orientation to a family member, while only 7.7% disclosed to a healthcare provider. Disclosure of sexual orientation was associated with health service

utilization, so that those who had disclosed to family or healthcare providers were more likely to use health services. The reason for this association may be manifold. Disclosure may be an indication of increased self-esteem or self-worth, leading to a greater inclination to take care of one's self and seek health services. Alternatively, persons who have already disclosed to family or their healthcare provider may be less worried about unintended disclosure as a consequence of seeking health services. Among participants who did not prefer a provider or facility specializing in health services of MSM or TW, fear of unintended disclosure was the most common reason.

Based on the findings of this study, increasing disclosure of sexual orientation to family and healthcare providers would remove an access barrier to health service utilization. Disclosure may also increase overall quality of life, thereby reducing depression, stress, and risk behavior linked to a low sense of self-worth.

INCREASED SUPPORT FOR SELF-ACCEPTANCE AMONG MSM AND TW POPULATIONS

Recommendation

Interventions to increase HIV testing should address self-acceptance among MSM and TW in addition to specific illness-related barriers to testing uptake. Healthcare providers, equal with NGOs and civil society groups, should play a role in these types of interventions that may include individual and group counseling.

Findings that support this recommendation

There are several indications from the results of this study that MSM and TW persons in El Salvador may struggle with their sense of self due to their sexual orientation. First, as noted previously, a third of participants had not disclosed sexual behavior with men or TW to any other person. A substantial proportion of men identified as bisexual (52.0%) or heterosexual (4.7%), although receptive or penetrative anal sex within the last 12 months was part of eligibility criteria for participation in the study. Further, among those who reported sex in the last 6 months, only 12.9% reported a female partner. While this might be due to interpretation of bisexuality based on role positioning during sex (penetrative partner), the high proportion of bisexual and heterosexual orientation is also a possible indicator of low self-acceptance of sexual orientation, at least among MSM.

Low acceptance of gender identity and orientation may prohibit disclosure, which is noted as important for health services utilization. However, low acceptance may also be linked to other health outcomes including stress, anxiety and depression. A substantial proportion of MSM and TW in this study reported contemplation of suicide (26.8%). A substantial proportion also reported substance use that may be used as a coping mechanism, including 60.5% of participants reporting binge drinking and 15.3% reporting illicit drug use in the last 30 days. Self-acceptance of sexual orientation was measured through an index of internalized homonegativity among MSM. Participants with high levels of internalized homonegativity were significantly less likely to have ever tested for HIV, demonstrating a direct link between low self-acceptance of sexual orientation and HIV service utilization.

INCLUSION OF TRAINING ON HEALTH NEEDS OF MSM AND TW IN HEALTHCARE CURRICULUM

Recommendation

While the majority of participants preferred a provider that specializes in the health needs of MSM, the majority of MSM and TW also reported a preference for a general practitioner. This may serve as an indication of the desire for health services more broadly than just HIV/STI. It also suggests that it is not sufficient to train only a small cadre of specialist for MSM and TW. Rather, training in the health needs and appropriate treatment

of MSM and TW should extend to the training and curriculum for all health professionals. Engaging medical universities and medical professional associations in this effort will be challenging, but necessary to achieve this goal. It should also be noted that participants stated a preference for providers who are themselves sexual minorities. Thus, another way to support changes within the health system would be to promote MSM and TW in the pursuit of training as healthcare professionals. This would facilitate more sexual minorities as service providers for MSM and TW clients. They may also become leaders within the healthcare community well positioned to advance changes in how services are provided to these populations.

Findings that support this recommendation

Several findings from this study indicate an urgent need to address factors within the health system to increase health service utilization among MSM and TW. Reported experienced discrimination when seeking health services ranged from 55.4–62.0% for individual items measuring forms of discrimination by a healthcare provider, and was higher among TW compared to MSM. Participants reporting having experienced high levels of discrimination by healthcare providers were less likely to use health services in the last 12 months. This indicates a clear need for additional training on the part of current and future healthcare providers, as well as staff at health facilities, on respectful and appropriate treatment of sexual minorities.

It should also be noted that participants who reported access to a provider with characteristics that are supportive to MSM and TW were more likely to use health services than those without access to this type of provider. Characteristics of support were based on interpersonal communication skills as well as standards for maintaining confidentiality and treating clients in a non-judgmental manner, and with dignity and respect. Equipping healthcare providers with these types of skills would likely increase health service utilization among MSM and TW.

It should also be noted that the majority of participants preferred a provider or facility that specializes in the health needs to MSM and TW, and the main reason for this preference was increased technical skill in the health needs of MSM and TW. Training on specific health needs including stress, depression, PTSD for sexual and physical assault and experienced discrimination, and substance use is important for this population [2, 6]. These health needs must be recognized as important in addition to the focus on sexual health that has been the standard approach to health services for MSM and TW due to their increased vulnerability to HIV/STI. It is clear that the healthcare system must begin to address MSM and TW in a holistic manner, not just in relation to their sexual behavior.

COMMUNITY MOBILIZATION AND ADVOCACY TO PROMOTE SOCIAL ACCEPTANCE OF SEXUAL MINORITIES

Recommendation

It is important to address the underlying causes of economic and social vulnerability for MSM and TW in order to increase health service utilization, decrease sex work and associated HIV/STI vulnerability, and improve the overall quality of life and well-being of these populations. While steps to create these changes will require action from within the MSM and TW populations themselves, it is also necessary to create change at the community level through appropriate advocacy and structural change.

Findings to support this recommendation

Similar to other studies among MSM and TW in El Salvador, the findings of this study indicate that these groups are economically and socially vulnerable. For example, 9.2% of the total population and 17.1% of TW

had no formal education or primary education only, compared to 7.1% of the general male population in San Salvador [25]. Just over a quarter of participants earned no monthly income. Among those who did earn an income, a substantial number reported sex work as their primary means of income generation, again with this percentage being higher among TW. Almost half were worried about food for themselves of their family in the last 6 months, and a quarter reported unstable housing. A total of 15.0% had ever been incarcerated, with more TW experiencing incarceration compared to MSM. Fewer MSM and TW had access to public or private health insurance (22.2%) compared to the general male population (38.7%) [25]. Health insurance access along with earning no monthly income, was associated with less health service utilization in the last 12 months.

INCREASED STRATEGIC TARGETING OF HIV TESTING SERVICES

Recommendation

Increased targeting of HIV testing strategies towards higher risk MSM and TW is warranted. One strategy might be to use social network referrals of PLHIV or persons reporting high risk behavior as a mechanism for actively recruiting persons for HIV testing services. Monitoring and evaluation data should be used to determine the most efficient locations and strategies for providing HIV testing services.

Findings that support this recommendation

In this study a majority of participants had tested for HIV. Findings also suggest that those who do test for HIV receive quality services, although, TW were more likely than MSM to report having experienced discrimination when testing for HIV. However, it is not clear that those at highest risk for infection are the ones testing, nor that testing strategies are appropriately targeted to increase case identification of positives. There was no difference in risk behavior for those testing ever or in the last 12 months compared to persons who did not test. Further, while most people report testing during the National HIV testing day or a similar event, the data does not indicate that clients that test at these events are at higher or equal risk for HIV than clients testing at other venues.

Rather than the number of persons testing as an indicator of HIV testing service performance, it is important to move towards case identification as a marker of effectiveness for these programs. For example, recent efforts to capture persons testing for the first time versus re-testers, is a move in the right direction towards identifying more strategically targeted services. In this study, persons who think that most of their social acquaintances have tested for HIV were more likely to test, as were persons who know a PLHIV. Social network referral strategies have proven successful in this context for research studies, such as the current investigation and may also serve as a recruitment strategy for HIV testing programs.

STUDY LIMITATIONS

The main limitation of this study is the cross sectional nature of the study design that prohibits the establishment of causal relationships, or the ordering of associations observed in this study. For example, while this data established that more participants who sought health services had a regular source of care, it is not clear if having a regular source of care was an outcome of having sought health services or a predictor of seeking health services. Data was elicited through self-report and this may have led to social desirability bias. Weighting of the variables using RDSAT is based on the social network size provided by the participant, which may be difficult for individuals to conceptualize and report with accuracy. In multivariate regression analysis it was only possible to weight the outcome variable, while item weights that account for both social network size and homophily are most appropriate for the analysis of RDS data.

Despite these limitations, the results presented in this study make a unique contribution to the literature on health service utilization and HIV service utilization including HIV testing among both MSM and TW. The results of this study indicate a need for comprehensive sexual and reproductive health services for MSM and TW, and integration between HIV and sexual and reproductive health programs. The results highlight the important influence of culture and gender norms including concepts of masculinity and gender identity on health seeking behaviors for MSM and TW. It is important to further explore these links using both qualitative and quantitative research methods, as well as further development of interventions to address these complex issues.

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Appendix A: Supplementary Analysis of Other's Perceived Awareness of Sexual Orientation

Participants were asked to reflect on the proportion of their family and social relations, whom they believed were aware that they had sexual relationships with men or TW. Perceived awareness of participant's sexual behavior with men or TW was low among family members. Nearly half of the participants (48.3%) believed that few or none of their family members knew they had sex with men or TW. A total of 17.0% thought that half of their family members knew, and 34.7% thought that all or almost all of their family members knew. Perceived awareness of participant's sexual behavior among family members was more prevalent among TW compared to MSM. The majority of TW (57.6%) believed that all or almost all of their family members knew compared to only 29.3% among MSM. Conversely, the proportion of TW who believed that few or none of their family members knew was smaller compared to MSM (25.5% TW compared to 53.6% among MSM).

The pattern was similar among friends. Almost half (48.0%) reported that all or almost all of their friends knew. Smaller percentages believed that half (22.9%), or few or none (29.1%) of their friends knew. Perceived awareness among friends of sexual relationships with men or TW was higher among TW compared to MSM. The percentage reporting that all or almost all of their friends knew was 71.8% for TW compared to 42.3% for MSM. The percentage who reported half of their friends knew was 11.9% for TW compared to 25.5% of MSM. Finally, only 16.3% of TW thought that few or none of their friends knew compared to 32.2% of MSM.

The pattern among coworkers was similar to that for friends and family. A total of 40.2% of the participants believed that all or almost all of their coworkers knew they had sex with men or TW. A total of 23.4% of participants thought that half their coworkers knew. Slightly more than a third (36.4%) thought that few or none of their coworkers knew. TW were more likely to believe that coworkers knew about their sexual behavior with men or TW compared to MSM. The percentage reporting that all or almost all of their coworkers knew was 72.8% for TW compared to 33.1% for MSM. The percentage who reported half of their coworkers knew was 13.2% for TW compared to 25.7% of MSM. Finally, only 13.9% of TW thought that few or none of their friends knew compared to 41.2% of MSM.

The pattern for doctors and health personnel was different than for family, friends and coworkers, in that the largest percentage (40.0%) believed that few or none of their doctors or health personnel knew that they had sex with men or TW. A total of 29.1% thought that about half of doctors and health personnel knew, while 30.9% thought that all or almost all of them knew. More TW than MSM thought that all or almost all of their doctors or health personnel knew (55.5% compared to 25.3%). A smaller proportion of TW (14.3%) than MSM (45.9%) thought that few or none of their doctors or health personnel knew.

Table A.1: Perceived quantity of family and social relations that are aware of participant's gender identity and sexual orientation, San Salvador, El Salvador, 2011–2012

	Weighted % (95% CI)		
	MSM (N = 506)	TW (N = 164)	Total (N = 670)
Family members			
All/Almost all	**29.3** (24.1–35.2)	**57.6** (47.3–71.7)**	**34.7** (29.9–40.4)
Half	**17.1** (12.9–21.9)	**16.9** (7.9–25.9)	**17. 0** (13.2–21.1)
Few/None	**53.6** (47.1–59.4)	**25.5** (14.0–35.4)**	**48.3** (42.3–53.5)
Friends			
All/Almost all	**42.3** (37.7–49.0)	**71.8** (62.7–83.1)**	**48.0** (43.6–54.1)
Half	**25.5** (20.1–30.5)	**11.9** (4.1–18.0)**	**22.9** (18.2–27.1)
Few/None	**32.2** (26.3–37.0)	**16.3** (8.7–25.1)**	**29.1** (24.0–33.4)
Co-Workers			
All/Almost all	**33.1** (27.9–39.3)	**72.8** (65.0–84.7)**	**40.2** (35.4–46.4)
Half	**25.7** (20.2–30.6)	**13.2** (6.1–18.7)**	**23.4** (18.4–27.5)
Few/None	**41.2** (35.4–47.3)	**13.9** (5.7–21.5)**	**36.4** (31.0–41.8)
Doctors and health personnel			
All/Almost all	**25.3** (19.9–30.5)	**55.5** (45.0–68.3)**	**30.9** (25.9–36.1)
Half	**28.7** (23.5–33.9)	**30.2** (19.8–40.4)	**29.1** (24.5–33.6)
Few/None	**45.9** (40.4–52.1)	**14.3** (6.7–21.5)**	**40.0** (34.9–45.4)

** Significant difference in point estimate with confidence interval set at 0.05

Appendix B: Internalized Homonegativity Index

Table B.1: Internalized homonegativity among MSM in San Salvador, El Salvador, 2011–2012 (N = 506)

	n	Weighted %	95% CI
I feel ashamed of my homosexuality			
Strongly agree	77	15.8	11.3–20.3
Agree	55	11.5	7.2–15.3
Disagree	140	29.8	23.8–35.3
Strongly disagree	224	42.8	37.6–50.4
When I think of my homosexuality, I feel depressed			
Strongly agree	71	13.3	8.8–17.1
Agree	60	12.5	8.6–16.7
Disagree	167	36.9	29.5–43.0
Strongly disagree	199	37.2	32.5–44.8
Sometimes I feel that I might be better off dead than gay			
Strongly agree	62	11.6	8.0–16.1
Agree	52	10.4	6.6–14.1
Disagree	169	36.4	30.5–43.3
Strongly disagree	214	41.6	35.0–47.6
I sometimes feel that my homosexuality is embarrassing			
Strongly agree	66	12.2	8.6–16.8
Agree	73	13.2	9.0–17.1
Disagree	169	36.6	30.8–43.1
Strongly disagree	188	38.0	31.6–44.1
I am disturbed when people can tell I'm gay			
Strongly agree	77	13.8	10.2–19.0
Agree	129	25.1	19.9–30.4
Disagree	140	28.4	23.0–35.0
Strongly disagree	150	32.6	25.8–33.7
I sometimes resent my sexual orientation			
Strongly agree	60	11.5	7.8–16.3
Agree	96	19.2	5.0–25.3*
Disagree	175	36.2	29.6–42,2
Strongly disagree	166	33.0	26.3–38.8
When people around me talk about homosexuality, I get nervous			
Strongly agree	64	13.3	8.8–17.5
Agree	118	21.6	17.–28.0
Disagree	167	34.7	28.7–41.1
Strongly disagree	148	30.4	23.8–35.6

* Among self-reported males only (n=506)

	n	Weighted %	95% CI
When I think about my attraction towards men, I feel unhappy			
Strongly agree	56	11.5	7.7–15.9
Agree	90	17.3	13.3–23.4
Disagree	181	39.1	32.4–45.0
Strongly disagree	167	32.0	25.6–38.1
Sometimes I get upset when I think about being attracted to men			
Strongly agree	51	10.0	6.4–14.4
Agree	107	20.7	16.6–27.2
Disagree	173	38.3	31.2–43.4
Strongly disagree	164	31.1	24.7–37.2
I believe that it is unfair that I am attracted to men instead of women			
Strongly agree	53	11.1	7.2–15.6
Agree	98	18.7	14.1–23.4
Disagree	174	38.2	32.2–44.5
Strongly disagree	169	31.9	25.4–38.3
I wish I could control my feelings of attraction towards other men.			
Strongly agree	61	14.6	9.9–20.6
Agree	117	23.6	18.3–30.2
Disagree	166	35.1	29.8–42.0
Strongly disagree	149	26.7	20.2–30.8
I am thankful for my sexual orientation			
Strongly agree	129	25.2	19.5–31.1
Agree	186	30.9	30.9–43.6
Disagree	108	18.4	18.4–29.6
Strongly disagree	79	14.4	9.9–18.4
I see my homosexuality as a gift			
Strongly agree	137	26.0	19.5–31.4
Agree	144	29.4	23.0–34.9
Disagree	147	33.3	28.4–40.4
Strongly disagree	65	11.3	7.7–16.2
I am proud to be gay			
Strongly agree	184	29.2	23.1–36.2
Agree	167	33.0	25.9–38.6
Disagree	94	27.3	21.3–34.4
Strongly disagree	49	10.4	6.7–15.4
I believe that being gay is an important part of me			
Strongly agree	158	30.3	24.7–37.4
Agree	185	35.6	28.9–40.6
Disagree	98	25.1	19.2–31.6
Strongly disagree	52	9.1	6.0–12.6

	n	Weighted %	95% CI
I believe that public schools should teach that homosexuality is normal			
Strongly agree	181	32.6	26.4–39.9
Agree	172	34.1	26.8–39.0
Disagree	93	24.3	19.5–31.4
Strongly disagree	50	8.9	5.9–12.4
In general, I believe that homosexuality is as satisfactory as heterosexuality			
Strongly agree	177	31.0	24.6–37.3
Agree	174	35.7	29.6–41.7
Disagree	95	22.5	17.6–28.7
Strongly disagree	50	10.9	7.0–15.0
I believe that more gay men should appear on television and in film			
Strongly agree	164	30.3	24.4–37.9
Agree	182	37.4	30.4–43.2
Disagree	84	21.0	15.7–26.4
Strongly disagree	64	11.3	7.7–15.4
I believe that it is morally incorrect for men to be attracted to one another			
Strongly agree	80	14.5	10.7–20.0
Agree	128	27.8	21.5–32.1
Disagree	167	34.8	29.1–41.2
Strongly disagree	120	22.9	17.5–29.2
I believe that homosexuality is damaging to the order of society			
Strongly agree	69	14.4	10.4–19.6
Agree	98	17.8	13.1–21.8
Disagree	180	42.2	36.0–48.4
Strongly disagree	148	25.5	19.7–32.1
I believe that it is morally incorrect for men to have sex with men			
Strongly agree	67	10.3	6.4–14.4
Agree	110	22.9	17.7–28.1
Disagree	177	38.6	33.0–45.6
Strongly disagree	142	28.2	21.9–34.2
In general, I believe that gay men are more immoral than heterosexual men			
Strongly agree	66	10.7	6.7–14.8
Agree	105	22.1	16.8–27.1
Disagree	172	37.3	31.3–44.4
Strongly disagree	151	29.9	24.1–36.4
I believe it is ok for men to be attracted to each other emotionally, but not sexually			
Strongly agree	74	11.2	7.0–15.1
Agree	124	22.1	17.8–27.7
Disagree	167	40.2	34.2–46.9
Strongly disagree	129	26.5	20.3–32.2

Table B.2: Internalized homonegativity among MSM in San Salvador, El Salvador, 2011–2012 (N = 506)

Aggregate score	Weighted % (95% CI)		
	MSM (N = 506)	TW	Total (N = 506)
Median (range)	50 (23–83)	—	50 (23–83)
Cronbach's alpha	0.901	—	0.901

Appendix C: Social Support

Social support is a psychosocial construct that refers to assistance and resources exchanged through social relationships. Social support serves as an asset for people that can be drawn from in times of need, and has been shown to be important to health and health seeking behavior. In this study we measured social support using Zimet et. al.'s, 12-item Multidimensional Scale of Perceived Social Support (MSPSS) [26, 27]. This measure of social support emphasizes emotional and affective forms of support globally, and among three referent groups: family, friends, and significant others. In this study the scale was adapted from a 7-point to 4-point Likert response scale ranging from "strongly disagree" (lowest score 1) to "strongly agree" (highest score 4). A higher score indicates more social support.

In this study, Cronbach's alpha was 0.94 for the MSPSS, indicating high internal consistency of the measure. The possible score range for the measure using the adapted 4-point Likert response scale was 12–48. In this study, the median score among participants was 40 (range 12–48).

Table C.1: Perceived social support among MSM, San Salvador, El Salvador 2011–2012 (N = 669)

	n	Weighted %	95% CI
There is someone special in his life when he needs something			
Strongly agree	494	70.5	65.8–75.5
Agree	129	21.2	16.9–25.3
Disagree	27	4.8	2.3–7.5
Strongly disagree	31	3.5	2.0–5.6
There is someone special with whom he shares his happiness and fears			
Strongly agree	438	63.1	58.2–68.3
Agree	181	29.9	24.8–34.6
Disagree	31	3.4	2.0–5.1
Strongly disagree	19	3.6	1.5–6.1
My family tries to help me			
Strongly agree	391	58.1	52.8–63.2
Agree	200	30.5	25.9–35.3
Disagree	48	7.8	5.3–10.7
Strongly disagree	29	3.6	2.0–5.4
I receive the emotional help and support I need from my family			
Strongly agree	352	52.7	47.6–57.7
Agree	214	32.8	28.2–37.8
Disagree	64	9.1	6.4–12.1
Strongly disagree	37	5.4	3.2–7.7
I have a special person in my life who is a resource of consolation			
Strongly agree	375	52.8	47.3–58.0
Agree	227	37.5	32.2–42.9
Disagree	49	7.2	4.9–10.0
Strongly disagree	18	2.5	1.2–4.1

	n	Weighted %	95% CI
My friends try to help me			
Strongly agree	318	45.0	39.9–50.1
Agree	258	40.5	34.9–45.2
Disagree	67	9.9	7.1–13.4
Strongly disagree	26	4.5	2.5–7.9
I can count on my friends when I need them			
Strongly agree	305	42.9	37.7–48.1
Agree	264	41.0	35.6–46.1
Disagree	73	11.5	8.6–15.2
Strongly disagree	27	4.5	2.4–7.6
I can speak about my problems with my family			
Strongly agree	282	38.9	34.1–44.1
Agree	231	37.8	32.8–43.0
Disagree	102	14.4	11.1–17.8
Strongly disagree	54	8.8	5.6–12.2
I have friends whom I can share my happiness and pain			
Strongly agree	316	43.2	38.3–48.3
Agree	264	43.6	38.1–49.0
Disagree	63	9.1	6.4–12.0
Strongly disagree	26	4.1	2.1-6.8
There is someone his my life who cares about my feelings			
Strongly agree	335	45.5	40.8–50.6
Agree	246	41.0	35.1–46.0
Disagree	60	9.3	6.6–12.6
Strongly disagree	27	4.3	2.0–6.8
My family is available to help me make decisions			
Strongly agree	306	43.2	38.2–48.2
Agree	249	40.8	35.4–46.1
Disagree	70	9.2	6.3–11.6
Strongly disagree	42	6.8	4.5–10.6
I can talk about my problems with my friends			
Strongly agree	310	42.3	37.0–47.4
Agree	262	43.1	37.6–48.0
Disagree	72	9.6	7.0–12.7
Strongly disagree	26	5.0	2.7–8.5

Table C.2: Perceived social support among MSM and TW, San Salvador, El Salvador 2011–2012

	Weighted % (95% CI)		
Aggregate score	**MSM (N = 506)**	**TW (N = 164)**	**Total (N = 670)**
Median (range)	39 (12–48)	40 (12–48)	40 (12–48)
Cronbach's alpha	0.942	0.931	0.939

Appendix D: Male Role Attitudes Scale

Gender refers to the socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men and women[28]. At the individual level, gender can be measured as actual attributes that align with culturally defined masculine traits, or as attitudes and beliefs about appropriate behavior and character traits for men. This latter approach measures masculine ideology rather than masculinity per se, and has been shown to be associated with behavior related to sexual risk for HIV/STI [29]. In this study we used Pleck et. al.'s 8-item Male Role Attitudes Scale (MRAS), to capture participant's beliefs about appropriate behavior and characteristics for men. Items are based on character traits (e.g., the "sturdy oak" that restricts the display of emotion), and behavior related to sexual activity (e.g., that men should be more open to sex), and division of labor (e.g., that women should do more housework), that have been identified as important aspects of male gender identity in other psychological research. The 4-point Likert response scale ranged from "strongly disagree" (lowest score 1) to "strongly agree" (highest score 4), with higher scores indicating more traditional attitudes towards masculine norms.

In this study, Cronbach's alpha was 0.68 for the MRAS indicating good internal consistency of the measure. The possible score range for the measure is 8–32. In this study, the median score among participants was 23 (range 8–32).

Table D.1: Male role attitudes of MSM in San Salvador, El Salvador 2011–2012 (N = 669)

	n	% Ponderado	95% IC
It is essential for a man to have the respect of others			
Strongly agree	546	82.0	77.9–85.4
Agree	111	16.5	13.3–20.3
Disagree	7	0.5	0.1–1.1
Strongly disagree	5	1.0	0.1–2.4
A man always deserves the respect of his wife and children			
Strongly agree	513	75.6	70.9–80.0
Agree	135	22.2	18.0–26.7
Disagree	12	0.7	0.3–1.4
Strongly disagree	9	1.5	0.4–3.0
I admire a man who is sure of himself			
Strongly agree	495	72.3	68.5–77.1
Agree	144	23.0	18.4–26.5
Disagree	19	2.1	0.9–3.5
Strongly disagree	12	2.6	1.2–4.6
A man loses respect if he talks of his problems			
Strongly agree	140	31.1	26.0–36.1
Agree	208	22.5	18.5–26.8
Disagree	164	22.0	18.2–26.4
Strongly disagree	158	24.3	19.8–28.9

	n	% Ponderado	95% IC
A young man should be physically strong even if not very big			
Strongly agree	207	27.8	23.3–33.7
Agree	199	31.9	27.4–37.1
Disagree	134	19.7	15.6–23.5
Strongly disagree	127	20.6	15.7–24.5
It bothers me when a man acts like a woman			
Strongly agree	148	23.1	18.5–28.1
Agree	72	11.1	8.1–14.2
Disagree	154	22.2	18.1–26.4
Strongly disagree	295	43.7	38.7–48.5
I think that a husband should not do housework			
Strongly agree	104	12.5	9.2–15.7
Agree	82	11.7	8.8–14.7
Disagree	191	29.6	24.8–34.5
Strongly disagree	292	46.2	41.1–51.8
Men are always ready for sex			
Strongly agree	362	53.8	48.2–59.1
Agree	101	14.5	11.3–18.4
Disagree	92	13.5	10.2–17.4
Strongly disagree	113	18.2	13.9–22.2
Looking for help for a health problem is a weakness			
Strongly agree	118	14.4	10.9–17.7
Agree	125	21.0	16.6–25.3
Disagree	216	32.2	27.9–38.1
Strongly disagree	210	32.4	26.6–37.4
A sick man loses the respect of others			
Strongly agree	104	12.9	9.7–16.3
Agree	132	19.1	15.7–23.4
Disagree	236	36.8	32.1–42.4
Strongly disagree	195	31.3	25.3–36.0
True men do not let others tell them how to take care of themselves			
Strongly agree	155	21.1	16.6–25.5
Agree	125	18.2	14.2–22.2
Disagree	181	25.8	21.8–30.0
Strongly disagree	205	35.0	29.9–40.3

Table D.2: Male role attitudes of MSM in San Salvador, El Salvador 2011–2012

	Weighted % (95% CI)		
Aggregate score	MSM (N = 506)	TW (N = 164)	Total (N = 669)
Median (range)	23 (8-32)	23 (8-32)	23 (8-32)
Cronbach's Alpha	0.679	0.658	0.674

Appendix E: Survey Instrument

ELEGIBILITY

No.	Questions	Coding Categories	Skip to
READ ALOUD	The purpose of this study is to learn about your use of health services. We will maintain the information that you share with us confidential. During the interview we will speak about men who have sex with men and transgender women. When we refer to men who have sex with men that includes men who self-identify as gay, bisexual or heterosexual men who have had anal sex with other men or transgender women. When we refer to transgender women, it includes transgendered people and transsexuals.. Transgendered people are those who were born men, but self-identify as women. Transsexuals are people who are born men and have a sexual reassignment surgery to physically become women.		
P101	RDS CODE	RDS CODE _____	
P102	INTERVIEW NUMBER	INTERVIEW NUMBER _____	
P103	INTERVIEW LOCATION	RDS SITE 1 OTHER 0	 → P103a
P103a	NAME OF LOCATION	SPECIFY:_____	
P104	What is your age? **WRITE "97"IF DOES NOT KNOW** **WRITE "98" IF DOES NOT RESPOND**	AGE IN COMPLETE YEARS ☐☐	If less than 18 or does not know / does not respond →END
P105	Have you lived, worked or studied in the Department of San Salvador for at least the last 3 months?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	 →END →END →END
P106	In the last 12 months, have you had anal sex with a man or transgender woman? Anal sex is when a man or a transgender woman inserts his penis into your anus or when you insert your penis into the anus of another man or transgender woman.	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	 →END →END →END
P107	What relationship do you have with the person who gave you the coupon to participate in the study?	STRANGER 1 A CASUAL FRIEND 2 A CLOSE FRIEND 3 BOYFRIEND/GIRLFRIEND OR SEXUAL PARTNER 4 RELATIVE 5 OTHER: (specify)_____ 6 DOES NOT KNOW 97 NO RESPONSE 98	 →P109 → P109 → P109 → P109
P108	Do you know the name, nickname or alias of the person who gave you the coupon to participate in the study?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	 →END →END →END
P109	How did you get the coupon you brought?	IT WAS GIVEN TO HIM 1 HE FOUND IT 2 HE BOUGHT THE COUPON 3 HE EXCHANGED SOMETHING FOR THE COUPON 4 DOES NOT KNOW 97 NO RESPONSE 98	 →END →END →END →END →END

BACKGROUND			
No.	Questions	Coding Categories	Skip to
READ ALOUD Now we are going to talk about the number of gay, bisexual and heterosexual men and transgender women that you know. To arrive at a total number, I want you to think about the different aspects of your life, including work or study, family, and social, such as friends, sex partners and church. It is important that you take your time and answer these questions precisely. When speaking about anal sex we are referring to the person that inserted his penis into your anus or if you inserted your penis into the anus of another person.			
P201	How many men or transgender women do you know, (you know their name and they know yours), who have had anal sex with a man or transgender woman in the last 12 months? **IF THE PARTICIPANTE ANSWERS "0" ASK:** "Do you know the person that gave you the coupon to participate in this study? **IF "YES" MARK 1** **MARK "997" IF DOES NOT KNOW** **MARK "998" IF NO RESPONSE**	NUMBER OF MEN OR TRANSGENDER WOMEN ☐☐☐	if "0", "997" or "998" →END Review eligibility End and thank respondent
P202	Of these (P201) men and transgender women, how many are 18 years of age or older? **START WITH NUMBER FROM PREVIOUS RESPONSE** **MARK "997" IF DOES NOT KNOW** **MARK "998" IF NO RESPONSE**	NUMBER WHO ARE 18 YEARS OR OLDER ☐☐☐	if "0", "997" or "998" →END Review eligibility End and thank respondent
P203	Of these (P202) men and transgender women, how many have resided, worked or studied in the Department of San Salvador for at least the last 3 months? **START WITH NUMBER FROM PREVIOUS RESPONSE** **MARK "997" IF DOES NOT KNOW** **MARK "998" IF NO RESPONSE**	NUMBER RESIDE/WORK/STUDIED IN SAN SALVADOR ☐☐☐	if "0", "997" or "998" →END Review eligibility End and thank respondent
P204	Of these (P203) men and transgender women, how many have you seen in the last 2 weeks? **START WITH NUMBER FROM PREVIOUS RESPONSE** **MARK "997" IF DOES NOT KNOW** **MARK "998" IF NO RESPONSE** **WRITE THIS NUMBER ON PARTICIPANT CHECK LIST**	NUMBER SEEN IN LAST 2 WEEKS ☐☐☐	
P204a	Of these (P204) men how many are transgender women? **MARK "997" IF DOES NOT KNOW** **MARK "998" IF NO RESPONSE**	NUMBER OF TRANSGENDER WOMEN ☐☐	

P205	What religion do you belong to? **SPONTANEOUS** **MARK ONE**	CATHOLIC EVANGELICAL JEHOVAH'S WITNESS ATHEIST OTHER (SPECIFY):_____ DOES NOT KNOW NO RESPONSE	1 2 3 4 5 97 98	
P206	In what country were you born? **SPONTANEOUS** **MARK ONE**	EL SALVADOR GUATEMALA HONDURAS BELIZE NICARAGUA COSTA RICA PANAMÁ MÉXICO UNITED STATES OTHER COUNTRY DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 8 9 10 97 98	
P207	How long have you lived in El Salvador (in years)? **MARK "0" IF LES THAN 1 YEAR** **MARK "77" IF ENTIRE LIFE** **MARK "97" IF DOES NOT KNOW** **MARK "98" IF NO RESPONSE**	NUMBER OF YEARS		→P209
IF RESPONDENT WAS NOT BORN IN EL SALVADOR (P206), SKIP TO P209				
P208	In what department were you born? **SPONTANEOUS** **MARK ONE**	Ahuachapán Santa Ana Sonsonate Usulután San Miguel Morazán La Unión La Libertad Chalatenango Cuscatlán San Salvador La Paz Cabañas San Vicente NO SABE NO RESPONDE	1 2 3 4 5 6 7 8 9 10 11 12 13 14 97 98	

P209	In what department do you currently live? **SPONTANEOUS** **MARK ONE**	Ahuachapán Santa Ana Sonsonate Usulután San Miguel Morazán La Unión La Libertad Chalatenango Cuscatlán San Salvador La Paz Cabañas San Vicente NO SABE NO RESPONDE	1 2 3 4 5 6 7 8 9 10 11 12 13 14 97 98	
P210	How long have you lived in this department? **MARK "0" IF LESS THAN 1 YEAR** **MARK "97" IF DOES NOT KNOW** **MARK "98" IF NO RESPONSE**	NUMBER OF YEARS		
P211	What level of education do you have? **SPONTANEOUS** **MARK ONE**	DID NOT GO TO SCHOOL INCOMPLETE PRIMARY (1-6) COMPLETE PRIMARY (1-6) INCOMPLETE THIRD CYCLE (7-9) COMPLETE THIRD CYCLE (7-9) INCOMPLETE HIGH SCHOOL COMPLETE HIGH SCHOOL INCOMPLETE UNIVERSITY COMPLETE UNIVERSITY DOES NOT KNOW NO RESPONSE	0 1 2 3 4 5 6 7 8 97 98	
P212	Are you currently a student? **SPONTANEOUS** **MARK ONE**	YES, PART TIME YES, FULL TIME I AM NOT CURRENTLY A STUDENT DOES NOT KNOW NO RESPONSE	1 2 3 97 98	
P213	What is the <u>main</u> way you earn money? **MARK ONE** **SPONTANEOUS**	EMPLOYED BY OTHERS HIS OWN WORK – SELF EMPLOYED RECEIVES REMITTANCES SEX WORKER HIS PARENTS TAKE CARE OF HIM HIS PARTNER TAKES CARE OF HIM SELLS DRUGS OTHER ILLEGAL ACTIVITEIS OTHER:_____ DOES NOT EARN MONEY DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 8 9 10 97 98	 →P215 →P215 →P215
P214	Approximately how much money did you earn per month? **MARK "997" IF DOES NOT KNOW** **MARK "998" IF NO RESPONSE**	INGRESOS MONETARIOS $		
P215	How many people do take care of or depend on you economically?			

	WRITE "0" IF NO ONE DEPENDS ON THE PARTICIPANT. **MARK "97" IF DOES NOT KNOW** **MARK "98" IF NO RESPONSE**	NUMBER OF PEOPLE		
P216	In the last 30 days, where have you slept the majority of the nights? **SPONTANEOUS** **MARK ONE**	HIS OWN HOME OR APARTMENT HIS MOTHER OR FATHER'S HOME HIS FRIEND'S HOME HIS PARTNER'S/LOVER'S HOME HOTEL/MOTEL SHELTER HOSPITAL STREET OTHER:_____ DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 8 9 97 98	
P217	Who regularly lives in your home? **MARK ALL THAT APPLY** **SPONTANEOUS**	FEMALE SEXUAL PARTNER TRANSGENDER WOMAN SEXUAL PARTNER PARENTS SIBLINGS/OTHER RELATIVES HIS CHILDREN FRIENDS/COLLEAGUES OTHER:_____ DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 97 98	
P218	In the last 6 months was there at least one night where you did not have a place to sleep or were homeless?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P219	In the last 6 months were you ever concerned about having enough food for you or your family?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P220	Currently, you are… **READ EACH RESPONSE** **MARK ONE**	Married with a woman Common law union with a woman Single Do not have a female partner DOES NOT KNOW NO RESPONSE	1 2 4 5 97 98	→P222 →P222
P221	Have you ever been married to a woman?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P222	Currently do you have a stable partner that is a man or a transgender woman?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P223	How many sons and daughters do you have? **MARK "97" IF DOES NOT KNOW** **MARK "98" IF NO RESPONSE**	NUMBER OF CHILDREN		

P224	How many times in your life have you ever been incarcerated for more than 48 hours or 2 days? **MARK "97" IF DOES NOT KNOW** **MARK "98" IF NO RESPONSE**	NUMBER OF TIMES ☐☐	If "0", "97" or "98" →P226
P225	In the <u>last 12 months</u> how many times have you been incarcerated for more than 48 hours or 2 days? **MARK "97" IF DOES NOT KNOW** **MARK "98" IF NO RESPONSE**	NUMBER OF TIMES ☐☐	
P226	In the last 12 months, have you suffered any type of abuse of maltreatment because you are gay, bisexual or a transgender woman or because you were suspected of having sex with men? **READ ALOUD:** By abuse or maltreatment, we mean hitting, punching, kicking, threats, scolding or humiliating.	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	

HEALTH SERVICES

No.	Questions	Coding Categories		Skip
P301	Are you affiliated with or a beneficiary of public or private health insurance?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P303 →P303 →P303
P302	With which health insurance are you affiliated? **MARK ALL THAT APPLY** **SPONTANEOUS**	PUBLIC INSURANCE PRIVATE INSURANCE DOES NOT KNOW NO RESPONSE	1 2 97 98	
P303	Would you say that in general your health is excellent, very good, good, fair or poor? **READ ALL OF THE OPTIONS** **MARK ONE**	EXCELLENT VERY GOOD GOOD FAIR POOR DOES NOT KNOW NO RESPONSE	5 4 3 2 1 97 98	
P304	Do you have a regular doctor or other healthcare provider who you usually go to when you are sick or need medical care?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P305 →P305 →P305
P304a	How long has this person been your doctor or health provider? **MARK THE NUMBER OF YEARS MENTIONED** **IF LESS THAN 1 YEAR, ENTER ZERO "0".** **ENTER "97" IF DON'T KNOW** **ENTER "98" IF NO RESPONSE**	YEARS ☐☐	
P304m	**MARK THE NUMBER OF MONTHS MENTIONED** **ENTER "97" IF DON'T KNOW** **ENTER "98" IF NO RESPONSE**	MONTHS ☐☐	
P305	Do you have a health facility, such as a health center, where you go to normally when you are sick or need medical care?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P306 →P306 →P306

P305a	How long has this person been your doctor or health provider? **MARK THE NUMBER OF YEARS MENTIONED** **IF LESS THAN 1 YEAR, ENTER ZERO "0".** **ENTER "97" IF DON'T KNOW** **ENTER "98" IF NO RESPONSE**	YEARS		
P305m	**MARK THE NUMBER OF MONTHS MENTIONED** **ENTER "97" IF DON'T KNOW** **ENTER "98" IF NO RESPONSE**	MONTHS		
P306	In the last 12 months have you visited a doctor or other health care professional when you needed medical care for yourself?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P308 →P308 →P308
P307	Where did you go when you needed medical care for yourself in the last 12 months **SPONTANEOUS** **MARK ALL THAT APPLY AND FOR EACH ONE:**	HOSPITAL-MINSAL At what HOSPITAL-MINSAL did you specifically go to in the last 12 months? _____ CLINIC-MINSAL At what CLINIC-MINSAL did you specifically go to in the last 12 months? _____ HOSPITAL-ISSS At what HOSPITAL-ISSS did you specifically go to in the last 12 months? _____ CLINIC-ISSS At what CLINIC-ISSS did you specifically go to in the last 12 months? _____ HOSPITAL-PRIVATE At what HOSPITAL-PRIVATE did you specifically go to in the last 12 months? _____ CLINIC/DOCTOR PRIVATE At what PRIVATE CLINIC/DOCTOR did you specifically go to in the last 12 months? _____ PHARMACY At what PHARMACY did you specifically go to in the last 12 months? _____ OTHER Specify:_____ MOBILE UNIT At what MOBILE UNIT did you specifically go to in the last 12 months? _____ DOES NOT KNOW NO RESPONSE	1 a 2 b 3 c 4 d 5 e 6 f 7 g 8 h 9 i 97 98	

P308	In the last 12 months, have you ever needed medical care from a health care provider but did not get it? READ THE RESPONSES MARK ONE	I did not need medical attention in the last 12 months I did not obtain medical attention when you needed it Yes, I obtained medical attention every time that I needed it. DOES NOT KNOW NO RESPONSE	2 1 0 97 98	→P314a →P309 →P310 →P310 →310
P309	The last time that you needed medical care but did not get it, what was the health problem you had? **SPONTANEOUS** **MARK ONE**	RESPIRATORY PROBLEMS CARDIOVASCULAR PROBLEMS PROBLEMS WITH "NERVES" ALLERGY PROBLEMS URINARY TRACT PROBLEMS MUSCLE PROBLEMS DENTAL PROBLEMS GASTROINTESTINAL PROBLEMS SYMPTOMS OF A SEXUALLY TRANSMITTED INFECTION (SECRETION, PUS, ULCER OR BOILS IN OR AROUND YOUR PENIS OR ANUS) OTHER:_____ DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 8 9 10 97 98	
P310	During the last 12 months, was there a time when you had a medical problem but postponed seeking care when you needed it, but eventually received care?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P311	In the last 12 months, was there any time when you did not fill a prescription for medicine when you needed it?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P312	In the last 12 months has there been a time when you didn't follow the doctor's advice or treatment plan? IF "NO", REVIEW P311	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P313	In the last 12 months has there been a time when you didn't keep a follow up appointment with a doctor?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	

READ ALOUD: I am going to read you a list of reasons that could influence your decision to seek medical care when you need it. How much have the following reasons influence your decision to seek care in the past? For each reason, you can answer if it influenced you "A lot" "A little" or "None"

READ EACH REASON AND RESPONSE

		A Lot	A Little	None	DK	NR
P314a	You worried about the provider's lack of confidentiality.	2	1	0	97	98
P314b	You thought that the provider will judge you.	2	1	0	97	98
P314c	You did not want others to find out about your sexual orientation.	2	1	0	97	98
P314d	You had to wait a long time in the clinic or hospital to be seen by the provider.	2	1	0	97	98
P314e	You were afraid that other patients will discriminate against you.	2	1	0	97	98
P314f	There was not a provider with sufficient knowledge to treat your problem.	2	1	0	97	98
P314g	There was no provider with whom you feel comfortable talking about your problem.	2	1	0	97	98
P314h	Your health problem embarrassed you.	2	1	0	97	98
P314i	There was no place with quality equipment, medical supplies or medicine to treat your problem.	2	1	0	97	98
P314j	You did not know where to go to receive medical attention for your problem.	2	1	0	97	98
P314k	You were afraid to learn that you had a grave sickness or problem.	2	1	0	97	98

P314l	The provider was far from you.	2	1	0	97	98
P314m	You could not go to the provider during his/her hours of attention.	2	1	0	97	98
P314n	You did not have enough money for medical assistance or medicine.	2	1	0	97	98
P314º	You were afraid of discrimination from the health provider, such as the doctor or nurse, etc.	2	1	0	97	98
P314p	You were afraid of discrimination from the administrative personnel, such as the guard, receptionist, etc.	2	1	0	97	98
P314q	You were afraid of being accosted o sexually abused by health facility personnel.	2	1	0	97	98

P315	Do you have other important reasons that you influenced your decision to look for medical attention when you needed it?	SI 1 NO 0	→P316
P515a	What are these reasons?	Other:_____ _____	

READ ALOUD: Next we are going to talk about how often you have had certain experiences with healthcare providers. You can respond "always" "sometimes" or "never".

READ ALOUD: In general, when getting medical care how often has the following occurred because the health care provider knew or suspected that you had sex with men or with transgender women?		Always	Sometimes	Never	DK	NR
P316	……you have been treated with less respect than other people?	2	1	0	97	98
P317	…you have received a poorer quality service than other people?	2	1	0	97	98
P318	…you have experienced discrimination?	2	1	0	97	98
P319	…they refused to give you services?	2	1	0	97	98
READ ALOUD: In general, when you have received medical care, how often…						98
P320	…was it necessary to pretend or explicitly say that you were heterosexual?	2	1	0	97	98
P321	…did you inform the health care provider that you had sex with other men or transgender women?	2	1	0	97	98

READ ALOUD: I am now going to ask you about your access to different types of health care providers, such as doctors and nurses

If you needed care, do you have access to a health care provider:		SI	NO	DK	NR
P322	…who treats you with respect and dignity?	1	0	97	98
P323	…who does not judge you negatively?	1	0	97	98
P324	… who is sufficient knowledgeable about the health needs of men who have sex with men or transgender women?	1	0	97	98
P325	…that maintains his patients' confidentiality	1	0	97	98
P326	… with whom you feel comfortable asking questions about HIV and other sexually transmitted infections.	1	0	97	98
P327	…with whom you feel comfortable asking questions about sexual behavior.	1	0	97	98

HEALTH CARE PREFERENCES

No.	Questions	Coding Categories		Skip
P401	If you could choose, what time of day would you prefer to see the health care provider? **READ EACH OPTION EXCEPT NO PREFERENCY AND DOES NOT KNOW. MARK ONLY 1**	Morning (7:00 – 11:59 Afternoon(12:00 – 18:59) Night (19:00– 22:00) NO PREFERENCE DOES NOT KNOW NO RESPONSE	1 2 3 4 97 98	
P402	If you could choose, would you prefer to be seen by a male or female health care provider?	MAN WOMAN SOMEONE FROM THE "SEXUAL DIVERSITY" NO PREFERENCE DOES NOT KNOW NO RESPONSE	1 2 3 4 97 98	

403	If you could choose, what type of a facility would you prefer to go to for medical care? **SPONTANEOUS** **MARK ONE AND ASK:** **"Specify:"**	HOSPITAL-MINSAL	1	
		Specify:_____	1ª	
		CLINIC-MINSAL	2	
		Specify:_____	2ª	
		HOSPITAL-ISSS	3	
		Specify:_____	3ª	
		CLINIC-ISSS	4	
		Specify:_____	4ª	
		HOSPITAL-PRIVATE	5	
		Specify:_____	5ª	
		CLINIC/DOCTOR PRIVATE	6	
		Specify:_____	6ª	
		PHARMACY	7	
		Specify:_____	7ª	
		OTHER	8	
		Specify:_____	8ª	
		NO PREFERENCE	9	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P404	If you could choose, what type of health care provider would you prefer to go to for medical care? **MARK ONE** **SPONTANEOUS**	SPECIALIST	1	
		GENERAL PRACTITIONER	2	→P406
		NURSE	3	→P406
		PHARMACIST	4	→P406
		OTHER:_____	5	→P406
		NO PREFERENCE	6	→P406
		DOES NOT KNOW	97	→P406
		NO RESPONSE	98	→P406
P405	What type of specialist would you prefer to go to for medical care? **MARK ONE** **SPONTANEOUS**	UROLOGIST	1	
		PROCTOLOGIST	2	
		GYNOCOLOGIST	3	
		GASTROENTEROLOGIST	4	
		ENDOCRINOLOGIST	5	
		INFECTOLOGIST	6	
		OTHER:_____	7	
		NO PREFERENCE	8	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P406	In general, if you could choose, would you prefer to go to a health provider that focuses on the health needs of men who have sex with men or of transgender women instead of a health provider who treats the general population?	YES	1	
		NO	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P407	In general, if you could choose, would you prefer to go to a health facility that is officially designated as "friendly" to men who have sex with men or to transgender women?	YES	1	
		NO	0	→P409
		DOES NOT KNOW	97	→P409
		NO RESPONSE	98	→P409
P408	What is the principle reason why you prefer to go to a center that is friendly to men who have sex with men or to transgender women? **MARK ONE** **SPONTANEOUS**	THEY DO NOT JUDGE HIM	1	→P501
		MORE KNOWLEDGE ABOUT MSM/TRANS WOMEN	2	→P501
		THEY DO NOT DISCRIMINATE AGAINST HIM	3	→P501
		CONFIDENTIALITY	4	→P501
		TRUST	5	→P501
		OTHER:_____	6	→P501
		DOES NOT KNOW	97	→P501
		NO RESPONSE	98	→P501

P409	Why would you not prefer to go to this type of a "friendly" center? **MARK ONE** **SPONTANEOUS**	FEAR THAT YOUR FAMILY WILL FIND OUT THAT YOU HAVE SEX WITH MEN	1	
		FEAR THAT YOU HAVE FRIENDS OR OTHER ACQUAINTANCES THAT YOU WILL FIND OUT THAT YOU HVE SEX WITH MEN	2	
		FEAR THAT YOU WILL BE ASSOCIATED WITH A GAY ORGANIZATION	3	
		IT IS NOT NECESSARY	4	
		OTHER:_____	5	
		DOES NOT KNOW	97	
		NO RESPONSE	98	

HIV/AIDS

No	Questions	Coding Categories		Skip
P501	Have you ever heard of HIV or the disease called AIDS?	YES	1	
		NO	0	→P601
		DOES NOT KNOW	97	→P601
		NO RESPONSE	98	→P601
P502	**READ ALOUD:** Please tell me all of the ways to prevent the transmission of HIV… **SPONTANEOUS, MARK ALL THAT APPLY.**			
	NOT SHARING NEEDLES		1	
	NOT HAVING SEX		2	
	USING A CONDOM CORRECTLY WHEN HAVING SEX		3	
	HAVING SEX WITH ONLY ONE PARTNER		4	
	DID NOT MENTION ANY OF THE PREVIOUS RESPONSES		5	
		NO RESPONSE	98	

	DIRECTED Do you believe that you can prevent HIV by…	YES	NO	DOES NOT KNOW	NO RESPONSE
P503a	…not sharing needles?	1	0	97	98
P503b	…not having sex?	1	0	97	98
P503c	…using condoms correctly during sex?	1	0	97	98
P503d	…having only 1 sexual partner?	1	0	97	98

P504	Is it possible that a person who looks healthy can have the virus that causes AIDS?	YES	1	
		NO	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	

		Very Likely	Somewhat Likely	Not very likely	Not at all likely	DK	NR
P505	How likely is it that you have HIV now? **READ EACH RESPONSE**	4	3	2	1	97	98
P506	How likely is it that you will ever get HIV in the future? **READ EACH RESPONSE**	4	3	2	1	97	98

P507	In the last 12 months, how many times have you participated in an educational activity, like a presentation, game or workshop, about HIV, sexually transmitted infections or sexual health? **IF THE PARTICIPANT ASNWERS DOES NOT KNOW, ASK:** Did you participate in at least 1 activity in the last 12 months? **ENTER "777" IF PARTICIPATED IN AT LEAST 1 TIME.** **ENTER "997" IF DOES NOT KNOW** **ENTER "998" IF NO RESPONSE**	NUMBER OF ACTIVITIES	☐☐☐	

P508	In the last 12 months, have you used the internet to obtain information about HIV, other sexually transmitted infections or sexual health?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P510 →P510 →P510
P509	What internet site is most useful for this information? **WRITE RESPONSE**	_____		
P510	Approximately how many people who you know have ever had an HIV test	All or almost all Half Few None DOES NOT KNOW NO RESPONSE	3 2 1 0 97 98	
P511	Do you know anyone who is infected with HIV?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P512	In the last 12 months, have you received the following services? **READ EACH OPTION** **MARK ALL THAT APPLY**	Free condoms Free lubricants Materials on the prevention of HIV or sexually transmitted infections like brochures or pamphlets References to have an HIV test Reference for an STI Assistance from the help line, SIDATEL Other:_____ DID NOT RECEIVE ANY SERVICES DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 8 97 98	
P513	If you needed services related to HIV or other sexually transmitted infections, would you prefer to be seen by a doctor who is a man, woman or someone from the "sexually diversity".	MAN WOMAN SEXUAL DIVERSITY NO PREFERENCE DOES NOT KNOW NO RESPONSE	1 2 3 4 97 98	
P514	If you needed services related to HIV or other sexually transmitted infections, to what type of health center would you prefer to go? **SPONTANEOUS** **MARK ONE AND ASK:** **"Specify:"**	HOSPITAL-MINSAL Specify:_____ CLINIC-MINSAL Specify:_____ HOSPITAL-ISSS Specify:_____ CLINIC-ISSS Specify:_____ HOSPITAL-PRIVATE Specify:_____ CLINIC/DOCTOR PRIVATE Specify:_____ PHARMACY Specify:_____ OTHER Specify:_____ NO PREFERENCE DOES NOT KNOW NO RESPONSE	1 1ª 2 2ª 3 3ª 4 4ª 5 5ª 6 6ª 7 7ª 8 8ª 9 97 98	

P515	If you needed services related to HIV or other sexually transmitted infections, to what type of health provider would you prefer to go? **SPONTANEOUS** **MARK ONE**	SPECIALIST GENERAL PRACTITIONER NURSE PHARMACIST OTHER:_____ NO PREFERENCE DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 97 98	 →P601 →P601 →P601 →P601 →P601 →P601 →P601
P516	If you needed services related to HIV or other sexually transmitted infections, to what type of specialist would you prefer to go?	UROLOGIST PROCTOLOGIST GYNOCOLOGIST GASTROENTEROLOGIST ENDOCRINOLOGIST INFECTIOUS DISEASE SPECIALIST OTHER:_____ NO PREFERENCE DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 7 8 97 98	

HIV TESTING

No	Questions	Coding Categories		Skip
P601	Have you heard of the test for HIV or AIDS?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →701 →701 →701
P602	When a person has had an HIV test, what can you find out about your state of health?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P603	According to you, what does a positive result to HIV test mean?	YOU ARE INFECTED WITH HIV YOU ARE NOT INFECTED WITH HIV OTHER DOES NOT KNOW NO RESPONSE	1 0 2 97 98	
P604	Have you ever had an HIV test?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P607a →P607a →P607a
P605	The last time you had an HIV test, did you receive the results?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P605a	In what month and year was you last HIV test? **ENTER "01/01/1997" IF DOES NOT KNOW** **ENTER "01/01/1998" IF NO RESPONSE**	MONTH YEAR	[ ][ ] [ ][ ]	
P606	Have you had an HIV test in the last 12 months?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	→P609

READ ALOUD: I am going to read you a list of reasons why some people have not had an HIV test. How have the following reasons influenced your decision to not have an HIV test? For each reason, you can answer if it influences you "A lot" "A little" or None
READ EACH OPTION
MARK A RESPONSE FOR EACH OPTION

		A Lot	A Little	None	DK	NR
P607a	You worried about the provider's lack of confidentiality.	2	1	0	97	98
P607b	You thought that the provider will judge you.	2	1	0	97	98
P607c	You did not want others to find out about your sexual orientation.	2	1	0	97	98
P607d	You had to wait a long time in the clinic or hospital to be seen by the provider.	2	1	0	97	98
P607e	You were afraid that other patients will discriminate against you.	2	1	0	97	98
P607f	There was not a provider with sufficient knowledge to do an HIV test.	2	1	0	97	98
P607g	There was no provider with whom you feel comfortable talking about HIV.	2	1	0	97	98
P607h	You were embarrassed to have an HIV test.	2	1	0	97	98
P607i	There was no place with quality equipment, medical supplies or medicine to have an HIV test.	2	1	0	97	98
P607j	You did not want to receive counseling about your risk of contracting HIV.	2	1	0	97	98
P607k	You did not know where to go to receive have an HIV test.	2	1	0	97	98
P607l	You were afraid to receive the results of the HIV test.	2	1	0	97	98
P607m	The provider was far from you.	2	1	0	97	98
P607n	You could not go to the provider during his/her hours of attention.	2	1	0	97	98
P607o	You did not have enough money for the HIV test.	2	1	0	97	98
P607p	You were afraid of discrimination from the health provider, such as the doctor or nurse, etc.	2	1	0	97	98
P607q	You were afraid of discrimination from the administrative personnel, such as the guard, receptionist, etc.	2	1	0	97	98
P607r	You were afraid of being accosted o sexually abused by health facility personnel.	2	1	0	97	98

P608	Did you have other important reasons for not having an HIV test?	YES	1	
		NO	0	→P631
		DOES NOT KNOW	97	→P631
		NO RESPONSE	98	→P631
P608a	What are these reasons? **WRITE RESPONSES**	Other:_____ _____		**SKIP TO P631**
P609	The last time you were tested, where was it done? **SPONTANEOUS** **MARK ONE AND ASK: "SPECIFY"**	HOSPITAL-MINSAL	1	
		Specify:_____	1ª	
		CLINIC-MINSAL	2	
		Specify:_____	2ª	
		HOSPITAL-ISSS	3	
		Specify:_____	3ª	
		CLINIC-ISSS	4	
		Specify:_____	4ª	
		HOSPITAL-PRIVATE	5	
		Specify:_____	5ª	
		CLINIC/DOCTOR PRIVATE	6	
		Specify:_____	6ª	
		PHARMACY	7	
		Specify:_____	7ª	
		OTHER	8	
		Specify:_____	8ª	
		MOBILE UNIT	9	
		ENTREAMIGOS	10	
		PASMO	11	
		FAIR, DAY OF THE TEST, OTHER EVENT	12	
		DOES NOT KNOW	97	
		NO RESPONSE	98	

P610	How much did you pay for the HIV test? **ENTER ZERO “)” IF THE TEST WAS FREE** **ENTER “997” IF DOES NOT KNOW** **ENTER “998” IF NO RESPONSE**	$	
P611	The last time you had the test, did you request it, was it offered to you and you accepted it, or was it required/obligatory?	REQUESTED 1 OFFERED AND ACCEPTED 2 REQUIRED/OBLIGATORY 3 DOES NOT KNOW 97 NO RESPONSE 98	
P612	How long did you wait to be seen by the provider?	LESS THAN 30 MINUTES 1 30 MINUTES TO 1 HOUR 2 1 HOUR TO 2 HOURS 3 MORE THAN 2 HOURS 4 DOES NOT KNOW 97 NO RESPONSE 98	

READ ALOUD: People have different experiences when the see a health care provider. I would like to talk about your experiences the last time you had an HIV test. The last time you had an HIV test:

		YES	NO	DOES NOT KNOW
P613	Did the provider explain the result would be confidential?	1	0	97
P614	Did the provider explain to you about the possible results of the test?	1	0	97
P615	Did you talk to the provider about having sex with men or transgender women?	1	0	97
P616	Did the provider explain how HIV are transmitted and prevented?	1	0	97
P617	Were you given condoms?	1	0	97
P618	Did you have sufficient privacy?	1	0	97
P619	Did the provider treat you with dignity and respect?	1	0	97
P620	Were you judged negatively by the provider?	1	0	97
P621	Did the health personnel, such as the doctor or nurse, discriminate against you?	1	0	97
P622	Did the administrative personnel, such as the guard or receptionist, discriminate against you?	1	0	97
P623	Did the other patients discriminate against you?	1	0	97
P624	Did the provider have sufficient knowledge about HIV and other sexually transmitted infections?	1	0	97
P625	Did the provider have sufficient knowledge about the health needs of men who have sex with men or transgender women?	1	0	97
P626	Did the provider dedicate the necessary time to you?	1	0	97
P627	Did the provider maintain confidentiality?	1	0	97
P628	Did you feel comfortable asking the provider questions about HIV and other sexually transmitted infections?	1	0	97
P629	Did you comfortable asking provider questions about sexual behavior?	1	0	97
P630	Would you recommend this provider to your male friends who have sex with men or transgender women?	1	0	97

P631	Will you have an HIV test in the next 12 months?	YES NO 0 DOES NOT KNOW 97	 →P633 →P633

P632	Where will you have the HIV test in the next 12 months?	HOSPITAL-MINSAL	1
		Specify:_____	1ª
		CLINIC-MINSAL	2
		Specify:_____	2ª
		HOSPITAL-ISSS	3
		Specify:_____	3ª
		CLINIC-ISSS	4
		Specify:_____	4ª
		HOSPITAL-PRIVATE	5
		Specify:_____	5ª
		CLINIC/DOCTOR PRIVATE	6
		Specify:_____	6ª
		PHARMACY	7
		Specify:_____	7ª
		OTHER	8
		Specify:_____	8ª
		MOBILE UNIT	9
		ENTREAMIGOS	10
		PASMO	11
		FAIR, DAY OF THE TEST, OTHER EVENT	12
		DOES NOT KNOW	97
		NO RESPONSE	98

READ ALOUD: People have different feelings and beliefs about taking an HIV test. I am going to read you a few statements about HIV tests. Please tell me if you Agree or Disagree with the following statements.

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	DK	NR
P633	It would hurt my reputation if I test for HIV.	4	3	2	1	97	98
P634	My family would treat me differently if I test for HIV.	4	3	2	1	97	98
P635	My friends would treat me differently if I test for HIV.	4	3	2	1	97	98
P636	People might find out I have had sex with men if I test for HIV.	4	3	2	1	97	98
P637	People might think I have done something to be ashamed of if I test for HIV.	4	3	2	1	97	98
P638	People might think I have HIV if I test.	4	3	2	1	97	98

READ ALOUD: Testing positive for in an HIV test, or being infected with the virus that causes AIDS, can change the life of someone in many ways. I will read you some statements about how someone might react to having a positive result for an HIV test. Please tell me if you agree or disagree with the following phrases.

READ ALOUD: Having a positive HIV test, or becoming infected with the virus that causes AIDS, can change someone's life in many ways. I will ready you a few statements about how you might react to this news. How strongly do you agree or disagree with the following statements?		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	DK	NR
P639	I would overcome any rejection I may face.	4	3	2	1	97	98
P640	I would keep from getting discouraged.	4	3	2	1	97	98
P641	I would deal with the physical symptoms.	4	3	2	1	97	98
P642	I would accept the fact that I had HIV.	4	3	2	1	97	98
P643	I would accomplish my life goals.	4	3	2	1	97	98
P644	I would deal with the side effects caused by the medication.	4	3	2	1	97	98
P645	I would still enjoy life.	4	3	2	1	97	98
P646	I would have consistent access to HIV treatment.	4	3	2	1	97	98
P647	I would have the support of my friends or family.	4	3	2	1	97	98

SEXUALLY TRANSMITTED INFECTIONS (STI)				
No.	Questions	Coding Categories		Skip
P701	Have you ever had secretion, pus, ulcers, boils, or warts on or near your penis or anus?	YES	1	
		NO	0	→P703
		DOES NOT KNOW	97	→P703
		NO RESPONSE	98	→P703
P702	Have you had secretion, pus, ulcer, boils, or warts on or near your penis or anus in the last 12 months?	YES	1	
		NO	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P703	Have you been diagnosed with a sexually transmitted infection in the last 12 months?	YES	1	
		NO	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
IF THE ANSWERS TO 702 AND 703 ARE NO, DOES NOT KNOW OR NO RESPONSE, SKIP TO QUESTION 801.				
P704	What did you do when you had a sexually transmitted disease or any of these symptoms that I mentioned?	SOUGHT MEDICAL ASSISTANCE AT A CLINIC/HOSPITAL OR DOCTOR	1	
		LOOKED FOR MEDICINE AT A PHARMACY	2	
		NOTHING – WAITED UNTIL SYMPTOMS DISAPPEARED	3	→P731a
		OTHER:_____	4	→P731a
		DOES NOT KNOW	97	→P731a
		NO RESPONSE	98	→P731a
P705	Where did you seek medical care the last time you were diagnosed with a sexually transmitted infection or had the symptoms I described? **SPONTANEOUS** **MARK ONE AND ASK:** **"Specify"**	HOSPITAL-MINSAL	1	
		Specify:_____	1ª	
		CLINIC-MINSAL	2	
		Specify:_____	2ª	
		HOSPITAL-ISSS	3	
		Specify:_____	3ª	
		CLINIC-ISSS	4	
		Specify:_____	4ª	
		HOSPITAL-PRIVATE	5	
		Specify:_____	5ª	
		CLINIC/DOCTOR PRIVATE	6	
		Specify:_____	6ª	
		PHARMACY	7	→P731a
		Specify:_____	7ª	
		OTHER	8	
		Specify:_____	8ª	
		MOBILE EUNIT	9	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P706	How much did you pay for this medical care? **ENTER ZERO "0" IF THE CARE WAS FREE** **ENTRE "997" IF DOES NOT KNOW** **ENTER "998" IF NO RESPONSE**	$		
P707	How long did you wait to be seen by the provider?	LESS THAN 30 MINUTES	1	
		30 MINUTES TO 1 HOUR	2	
		1 HOUR TO 2 HOURS	3	
		MORE THAN 2 HOURS	4	
		DO NOT KNOW	97	
		NO RESPONSE	98	

READ ALOUD: People have different experiences when the see a health care provider. I would like to talk about your experience the last time you sought care for a sexually transmitted infection or the symptoms I described earlier. The last time you sought care for a sexually transmitted infection:

		YES	NO	DK	NR
P708	Did the provider explain the result would be confidential?	1	0	97	98
P709	Did the provider explain to you about the possible results of any test for a sexually transmitted infection?	1	0	97	98
P710	Did you talk to the provider about having sex with men or transgender women?	1	0	97	98
P711	Did the provider explain how sexually transmitted infections are transmitted and prevented?	1	0	97	98
P712	Were you given condoms?	1	0	97	98
P713	Did you have sufficient privacy?	1	0	97	98
P714	Did the provider treat you with dignity and respect?	1	0	97	98
P715	Were you judged negatively by the provider?	1	0	97	98
P716	Did the health personnel, such as the doctor or nurse, discriminate against you?	1	0	97	98
P717	Did the administrative personnel, such as the guard or receptionist, discriminate against you?	1	0	97	98
P718	Did the other patients discriminate against you?	1	0	97	98
P719	Did the provider have sufficient knowledge about sexually transmitted infections?	1	0	97	98
P720	Did the provider have sufficient knowledge about the health needs of men who have sex with men or trans?	1	0	97	98
P721	Did the provider dedicate the necessary time to you?	1	0	97	98
P722	Did the provider maintain confidentiality?	1	0	97	98
P723	Did you feel comfortable asking the provider questions about sexually transmitted infections?	1	0	97	98
P724	Did you feel comfortable asking provider questions about sexual behavior?	1	0	97	98
P725	Did you feel comfortable asking the provider questions about your genitalia?	1	0	97	98
P726	Would you recommend this provider to other men who have sex with men or to transgender women?	1	0	97	98
P727	Were you offered an HIV test?	1	0	97	98

P728	Were you prescribed medicine for this problem?	YES	1	
		NO	0	→P801
		DOES NOT KNOW	97	→P801
		NO RESPONSE	98	→P801
P729	Did you get all, some, or none of the prescribed medicine?	ALL OF THE MEDICINE	2	→P801
		SOME OF THE MEDICINE	1	
		NONE OF THE MEDICINE	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P730	What are the reasons that you did not get the prescribed medicine? READ EACH ONE **MARK ALL THAT APPLY**	DID NOT HAVE ENOUGH MONEY	1	
		WAS TOO EMBARRASED	2	
		AFRAID THAT THE PHARMACIST WOULD JUDGE HIM	3	
		THERE WAS NO MEDICINE	4	
		THE FARMACY WAS TOO FAR AWAY	5	
		Other:_____	6	
		DOES NOT KNOW	97	
		NO RESPONSE	98	

SKIP TO P801

READ ALOUD: I am going to read you a list of reasons that could influence someone's decision to not seek medical care when they have sexually transmitted infection or the symptoms that I mentioned. What are the reasons that influenced your decision to not seek medical care the last time you had a sexually transmitted infection or the symptoms that I mentioned? For each reason, you can answer if it influences you "A lot" "A little" or "None".

READ EACH OPTION

MARK A RESPONSE FOR EACH OPTION

		A Lot	A Little	None	DK	NR
P731a	You worried about the provider's lack of confidentiality.	2	1	0	97	98
P731b	You thought that the provider was going to judge you.	2	1	0	97	98
P731c	You did not want others to find out about your sexual orientation.	2	1	0	97	98
P731d	You had to wait a long time in the clinic or hospital to be seen by the provider.	2	1	0	97	98
P731e	You were afraid that other patients will discriminate against you.	2	1	0	97	98
P731f	There was not a provider with sufficient knowledge to treat the symptoms or sexually transmitted infection that you had.	2	1	0	97	98
P731g	There was no provider with whom you felt comfortable talking about sexually transmitted infections.	2	1	0	97	98
P731h	The infection or symptoms embarrassed you.	2	1	0	97	98
P731i	There was no place with quality equipment, medical supplies or medicine for your symptoms or infection.	2	1	0	97	98
P731j	You did not want to receive counseling about your risk of contracting sexually transmitted infections.	2	1	0	97	98
P731k	You did not know where to go to receive medical care for the symptoms or sexually transmitted infection you had.	2	1	0	97	98
P731l	You were afraid to receive the results of a test for sexually transmitted infections.	2	1	0	97	98
P731m	The provider was far from you.	2	1	0	97	98
P731n	You could not go to the provider during his/her hours of attention.	2	1	0	97	98
P731o	You did not have enough money for the medical care or medicine.	2	1	0	97	98
P731p	You were afraid of discrimination from the health provider, such as the doctor or nurse, etc.	2	1	0	97	98
P731q	You were afraid of discrimination from the administrative personnel, such as the guard, receptionist, etc.	2	1	0	97	98
P731r	You were afraid of being accosted o sexually abused by health facility personnel.	2	1	0	97	98

P732	Do you have other important reasons for not seeking medical care when you had a sexually transmitted infection or the symptoms you mentioned?	YES	1	
		NO	0	→P801
		DOES NOT KNOW	97	→P801
		NO RESPONSE	98	→P801
P733	What are these reasons? **WRITE RESPONSES**	Other:_____ _____		

GENERAL SEXUAL BEHAVIOR

READ ALOUD

The next set of questions will ask you to reflect on your sexual activities. Some of these questions will be personal. I want to assure you that your responses are strictly confidential and nobody outside of the study will have access to them. When referring to sexual relations we mean the penetration of the penis in the anus, vagina or mouth.

I will begin with questions about how you identify sexually.

No.	Questions	Coding Categories		Skip
P801	What is your gender identity? **READ EACH RESPONSE** **MARK ONE**	Man	1	
		Woman	2	
		Transgender woman	3	
		Other	4	
		Specify:_____	4a	
		DOES NOT KNOW	97	
		NO RESPONSE	98	

P802	In terms of your sexual orientation, how do you identify yourself? **SPONTANEOUS** **MARK 1**	GAY OR HOMOSEXUAL 1 BISEXUAL 2 HETEROSEXUAL 3 OTHER 4 SPECIFY: _____ 5 DOES NOT KNOW 6 NO RESPONSE 7	

	Approximately how many people know that you form sexual relationships with men or trans? **READ EACH CATEGORY AND RESPONSE**	All or almost all	More or less half	Few or none	DK	NR
	How many know of your…					
P803a	…Family	3	2	1	97	98
P803b	…Friends	3	2	1	97	98
P803c	…Co-workers	3	2	1	97	98
P803d	Doctors, nurses, pharmacists or other providers	3	2	1	97	98

P804	Who have you told that that you form sexual relationships with men or transgender women? **SPONTANEOUS** **MARK ALL THAT APPLY**	FATHER 1 MOTHER 2 BROTHERS 3 SISTERS 4 OTHER RELATIVES 5 MALE FRIENDS 6 FEMALE FRIENDS 7 CO-WORKERS 8 DOCTORS 9 NURSE OR OTHER HEALTH CARE PROVIDERS 10 NO ONE 11 DOES NOT KNOW 97 NO RESPONSE 98	

READ ALOUD: The number of sexual partners people have had differs a lot from person to person.

P805	Including people you are having sex with now, how many sexual partners have you had in your lifetime? **ENTER "997" IF DOES NOT KNOW** **ENTER "998" IF NOR RESPONSE**	NUMBER OF SEX PARTNERS [ ][ ][ ]	If he answers "0" →END Review eligibility and end.
P806	How old were you when you had sex for the first time? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	AGE IN YEARS [ ][ ]	
P807	Have you ever received clothing, food, money, drugs or somewhere to sleep in exchange for sex with someone?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	 →P809 →P809 →P809
P808	In the last 12 months have you ever received clothing, food, money, drugs or somewhere to sleep in exchange for sex with someone?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P809	In the last 12 months have you ever given someone else money, drugs, clothing, food, or a place to sleep in exchange for them having sex with you?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P810	In the last 12 months, how many people have you had sex with? **ENTER "997" IF DOES NOT KNOW** **ENTER "998" IF NO RESPONSE**	NUMBER OF PEOPLE [ ][ ][ ]	If he answers "0" →END Review eligibility and end.
P811	In your life, have you ever been forced to have sex even	YES 1	

	if you did not want to? By forced sex we are referring to penetration of the penis in the anus, vagina or mouth.	NO 0 DOES NOT KNOW 97 NO RESPONSE 98	→P813 →P813 →P813
P812	In the last 12 months, did any of your male sexual partners force you to have sex with them even if you didn't want to?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P813	In the last 12 months, on how many occasions did you travel or were away from your residence for more than 1 month? **ENTER "997" IF DOES NOT KNOW** **ENTER "998" IF NO RESPONSE**	NUMBER OF OCCASIONS ☐☐☐	If "0", "997", "998" →901
P814	What were the most important reasons that you were away from your residence for more than 1 month? **MARK ALL THAT APPLY** **SPONTANEOUS**	WORK 1 VACATION 2 SICKNESS 3 STUDIES 4 INCARCERATION 5 OTHER:_____ 6 DOES NOT KNOW 97 NO RESPONSE 98	
P815	During the last 12 months, did you ever have anal or vaginal sex with someone who lived in these places the times that you were there?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	

PARTNER SPECIFIC SEXUAL BEHAVIOR

No.	Question	Coding Categories	Skip
READ ALOUD: Now I would like to ask you about your recent sexual activity. I can assure you that your answers are strictly confidential and no one outside of the team will have Access to them. We will not contact any of your sexual partners directly and we will not tell them the information that you are sharing. If you have questions or do not want to answer, please tell me and we will move on to the next question.			
P901	How many sexual partners have you had in the last 6 months? (men, transgender women, women) **ENTER "997" IF DOES NOT KNOW** **ENTER "998" IF NO RESPONSE**	NUMBER OF PARTNERS ☐☐	If 0, → P1001
READ ALOUD: I would like to make a list of the 3 most recent people with whom you have had sex so that we can talk about each one. Could you give me the first name, nickname or initials of the 3 most recent people that you've had sex with? Let's start with the last time you had sex.			
P902	How would you like me to refer to the <u>last</u> person with whom you had sex?	NAME OR NICKNAME_____	
P903	In what month and year was the <u>last time</u> you had sex with (P902)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	MONTH ☐☐ YEAR ☐☐	
P904	The last time you had sex with (P902) did you use a condom?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	

P905	In the last 6 months , how often did you use condoms with(P902)? **READ EACH OPTION**	Never 0 Sometimes 1 Always 2 DOES NOT KNOW 97 NO RESPONSE 98	
P906	(P902) is a man, women, transgender woman or transgender man? **MARK ONE**	MAN 1 WOMEN 2 TRANSGENDER WOMAN 3 TRANSGENDER MAN 4 DOES NOT KNOW 97 NO RESPONSE 98	

READ ALOUD

Now I would like to you to think whether this partner is a principle partner, occasional, casual, commercial, or client.

Principle Partners are primary partners. They are people with whom you have strong emotional connections and with whom you have sex regularly. You don't necessarily live together.

Occasional Partners: are people with whom you have regular sex and that there is exists an emotional connection but s/he is not your principle partner, such as a lover of "friends with benefits".

Casual Partners are people with whom you have sex every once in a while and there is no emotional connection. They are people have sex not in exchange for money, such as a hook up.

Commercial Partners are people that you pay to have sex**.**

Clients are people who pay you to have sex.

P907	What type of sexual partner do you consider (P902)? **READ EACH OPTION** **MARK ONE**	Principle partner 1 Occasional partner 2 Casual partner 3 Commercial partner 4 Client 5 Other:_____ 6 DOES NOT KNOW 97 NO RESPONSE 98	
P908	How old is (P902)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	YEARS ☐☐	
P909	In which department does (P902) usually live?	SAN SALVADOR 1 OTHER DEPARTAMENT 2 OTHER COUNTRY 3 DOES NOT KNOW 97 NO RESPONSE 98	

		YES	MAYBE	NO	DOES NOT KNOW	NO RESPONSE
P910	Is (P902) a sex worker?	2	1	0	97	98
P911	Is (P902) an injection drug user?	2	1	0	97	98
P912	Does (P902) use crack or cocaine (not injected)?	2	1	0	97	98
P913	Is (P902) infected with HIV?	2	1	0	97	98
P914	Has (P902) ever been in prison for more than 48 hours or 2 days?	2	1	0	97	98
P915	Do you think that (P902) will have a sexually transmitted infection ever in his life?	2	1	0	97	98
P916	Do you think that (P902) currently has other sexual partners in addition to you?	2	1	0	97	98

P917	How often have you had sex with (P902) in the last 6 months?	NEVER 0 ONCE 1 MONTHLY 2 A FEW TIMES A MONTH 3 WEEKLY 4 A FEW TIMES A WEEK 5 DAILY 6 DOES NOT KNOW 97 NO RESPONSE 98	

P918	Do you think that you will have sex with (P902) in the future?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P919	The last time you had sex with (P902) did both or either of you two drink alcohol or beer?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P920	The last time you had sex with (P902) did both or either of you use drugs?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P921	In what month and year did you first have sex with (P902)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	MONTH ☐☐ YEAR ☐☐	
P922	Did (P902) give you the coupon that you brought today to participate in the study?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P923	Aside from (P902), have you had sex with another person in the last 6 months?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	 →P1001 →P1001 →P1001
P924	How would you like me to refer to the second to last person with whom you had sex?	NAME OR NICKNAME_____	
P925	In what month and year was the last time you had sex with (P924)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	MONTH ☐☐ YEAR ☐☐	
P926	The last time you had sex with (P924) did you use a condom?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P927	In the last 6 months , how often did you use condoms with(P924)? **READ EACH OPTION**	Never 0 Sometimes 1 Always 2 DOES NOT KNOW 97 NO RESPONSE 98	
P928	(P924) is a man, women, transgender woman or transgender man?	MAN 1 WOMEN 2 TRANSGENDER WOMAN 3 TRANSGENDER MAN 4 DOES NOT KNOW 97 NO RESPONSE 98	

READ ALOUD

Now I would like to you to think whether this partner is a principle partner, occasional, casual, commercial, or client.

Principle Partners are primary partners. They are people with whom you have strong emotional connections and with whom you have sex regularly. You don't necessarily live together.

Occasional Partners: are people with whom you have regular sex and that there is exists an emotional connection but s/he is not your principle partner, such as a lover of "friends with benefits".

Casual Partners are people with whom you have sex every once in a while and there is no emotional connection. They are people have sex not in exchange for money, such as a hook up.

Commercial Partners are people that you pay to have sex**.**

Clients are people who pay you to have sex.

P929	What type of sexual partner do you consider (P924)? **READ EACH OPTION** **MARK ONE**	Principle partner 1 Occasional partner 2 Casual partner 3 Commercial partner 4 Client 5 Other:_____ 6 DOES NOT KNOW 97 NO RESPONSE 98	
P930	How old is (P924)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	YEARS	
P931	In which department does (P924) usually live?	SAN SALVADOR 1 OTHER DEPARTAMENT 2 OTHER COUNTRY 3 DOES NOT KNOW 97 NO RESPONSE 98	

		YES	MAYBE	NO	DK	NR
P932	Is (P924) a sex worker?	2	1	0	97	98
P933	Is (P924) an injection drug user?	2	1	0	97	98
P934	Does (P924) use crack or cocaine (not injected)?	2	1	0	97	98
P935	Is (P924) infected with HIV?	2	1	0	97	98
P936	Has (P924) ever been in prison for more than 48 hours or 2 days?	2	1	0	97	98
P937	Do you think that (P924) will have a sexually transmitted infection ever in his life?	2	1	0	97	98
P938	Do you think that (P924) currently has other sexual partners in addition to you?	2	1	0	97	98

P939	How often have you had sex with (P924) in the last 6 months?	NEVER 0 ONCE 1 MONTHLY 2 A FEW TIMES A MONTH 3 WEEKLY 4 A FEW TIMES A WEEK 5 DAILY 6 DOES NOT KNOW 97 NO RESPONSE 98	
P940	Do you think that you will have sex with (P924) in the future?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P941	The last time you had sex with (P924) did both or either of you two drink alcohol or beer?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P942	The last time you had sex with (P924) did both or either of you use drugs?	YES 1 NO 0 DOES NOT KNOW 97 NO RESPONSE 98	
P943	In what month and year did you first have sex with (P924)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	MONTH YEAR	

P944	Did (P924) give you the coupon that you brought today to participate in the study?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P945	Aside from (P924), have you had sex with another person in the last 6 months?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	 →P1001 →P1001 →P1001
P946	How would you like me to refer to the third to last person with whom you had sex?	NAME OR NICKNAME_____		
P947	In what month and year was the last time you had sex with (P946)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	MONTH YEAR	☐☐ ☐☐	
P948	The last time you had sex with (P946) did you use a condom?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P949	In the last 6 months , how often did you use condoms with(P946)? **READ EACH OPTION**	Never Sometimes Always DOES NOT KNOW NO RESPONSE	0 1 2 97 98	
P950	(P946) is a man, women, transgender woman or transgender man?	MAN WOMEN TRANSGENDER WOMAN TRANSGENDER MAN DOES NOT KNOW NO RESPONSE	1 2 3 4 97 98	

READ ALOUD

Now I would like to you to think whether this partner is a principle partner, occasional, casual, commercial, or client.

Principle Partners are primary partners. They are people with whom you have strong emotional connections and with whom you have sex regularly. You don't necessarily live together.

Occasional Partners: are people with whom you have regular sex and that there is exists an emotional connection but s/he is not your principle partner, such as a lover of "friends with benefits".

Casual Partners are people with whom you have sex every once in a while and there is no emotional connection. They are people have sex not in exchange for money, such as a hook up.

Commercial Partners are people that you pay to have sex**.**

Clients are people who pay you to have sex.

P951	What type of sexual partner do you consider (P946)? **READ EACH OPTION** **MARK ONE**	Principle partner Occasional partner Casual partner Commercial partner Client Other:_____ DOES NOT KNOW NO RESPONSE	1 2 3 4 5 6 97 98	
P952	How old is (P946)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	YEARS	☐☐	
P953	In which department does (P946) usually live?	SAN SALVADOR OTHER DEPARTAMENT OTHER COUNTRY DOES NOT KNOW NO RESPONSE	1 2 3 97 98	

		YES	MAYBE	NO	DK	NR

P954	Is (P946) a sex worker?	2	1	0	97	98
P955	Is (P946) an injection drug user?	2	1	0	97	98
P956	Does (P946) use crack or cocaine (not injected)?	2	1	0	97	98
P957	Is (P946) infected with HIV?	2	1	0	97	98
P958	Has (P924) ever been in prison for more than 48 hours or 2 days?	2	1	0	97	98
P959	Do you think that (P924) will have a sexually transmitted infection ever in his life?	2	1	0	97	98
P960	Do you think that (P946) currently has other sexual partners in addition to you?	2	1	0	97	98

P961	How often have you had sex with (P946) in the last 6 months?	NEVER ONCE MONTHLY A FEW TIMES A MONTH WEEKLY A FEW TIMES A WEEK DAILY DOES NOT KNOW NO RESPONSE	0 1 2 3 4 5 6 97 98	
P962	Do you think that you will have sex with (P946) in the future?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P963	The last time you had sex with (P946) did both or either of you two drink alcohol or beer?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P964	The last time you had sex with (P946) did both or either of you use drugs?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	
P965	In what month and year did you first have sex with (P946)? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	MONTH YEAR		
P966	Did (P946) give you the coupon that you brought today to participate in the study?	YES NO DOES NOT KNOW NO RESPONSE	1 0 97 98	

SF-12

No.	Questions	Coding Categories		Skip to
READ ALOUD: The following questions ask your opinion about your general health status. This information will permit us to know about how you feel and how well you can do your normal activities.				
The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much? **READ RESPONSES**				
P1001	Moderate activities, such as moving a table, sweeping, dusting, washing, playing soccer or baseball.	Yes, limited a lot Yes, limited a little No, not limited at all DOES NOT KNOW NO RESPONSE	2 1 0 97 98	

P1002	Climbing several flights of stairs:	Yes, limited a lot Yes, limited a little No, not limited at all DOES NOT KNOW NO RESPONSE	2 1 0 97 98	

During the past month, have you had any of the following problems with your work or other regular activities, as a result of your physical health?

P1003	Accomplished less than you would like:	Yes No DOES NOT KNOW NO RESPONSE	1 0 97 98	
P1004	Were limited in the kind of work or other activities:	Yes No DOES NOT KNOW NO RESPONSE	1 0 97 98	

During the past month, were you limited in the kind of work you do or other regular activities as a result of any emotional problems? (such as feeling depressed or anxious)

P1005	Accomplished less than you would like:	Yes No DOES NOT KNOW NO RESPONSE	1 0 97 98	
P1006	Didn't do work or other activities as carefully as usual:	Yes No DOES NOT KNOW NO RESPONSE	1 0 97 98	
P1007	During the past month, how much pain interferes with your normal work (including both work outside the home and housework)?	Not at all A little bit Moderately Quite a bit Extremely DOES NOT KNOW NO RESPONSE	0 1 2 3 4 97 98	

The next questions are about how you feel and how things have been during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past month:

		Always	Most of the time	A good bit of time	Some of the time	A Little of the time	None of the time	DK	NR
P1008	Have you felt calm and peaceful?	5	4	3	2	1	0	97	97
P1009	Did you have a lot of energy?	5	4	3	2	1	0	97	97
P1010	Have you felt downhearted and blue?	5	4	3	2	1	0	97	97
P1011	During the past month, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?	5	4	3	2	1	0	97	97

P1012	Have you ever thought about committing suicide?	I ALWAYS THINK ABOUT IT SOMETIMES I THINK ABOUT IT I HAVE NEVER THOUGHT AOBU IT DOES NOT KNOW NO RESPONSE	1 2 3 97 98	

ALCOHOL AND DRUGS				
No.	Questions	Coding Categories		Skip
P1101	In the last 30 days, did you drink alcohol or beer?	YES	1	
		NO	2	→P1103
		DOES NOT KNOW	97	→P1103
		NO RESPONSE	98	→P1103
P1102	In the last 30 days, how often did you drink 5 or more alcoholic drinks or beer in the same occasion? **ENTER "97" IF DOES NOT KNOW** **ENTER "98" IF NO RESPONSE**	NUMBER OF TIMES	☐☐	
P1103	Have you ever in your life used drugs ?(For example: Marihuana, Cocaine, Crack, Heroine, Glue)	YES	1	
		NO	0	→P1107
		DOES NOT KNOW	97	→P1107
		NO RESPONSE	98	→P1107
P1104	In the last 30 days, have you used any of the following drugs? **READ EACH RESPONSE** **MARK ALL THAT APPLY**	Anphetamines	1	
		Cocaine	2	
		Crack/Piedra	3	
		Thinner or Glue	4	
		Ecstasy	5	
		Heroine	6	
		Marihuana	7	
		Other_____	8	
		Does not use any drug	9	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P1105	In the last 30 days have you injected drugs, <u>not</u> including medicine or vitamins used for medical purposes?	YES	1	
		NO	0	→P1107
		DOES NOT KNOW	97	→P1107
		NO RESPONSE	98	→P1107
P1106	In the last 30 days, have you used a needle or syringe after someone who has injected drugs?	YES	1	
		NO	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	
P1107	In the last 30 days, have you injected medicine or vitamins for medical purposes?	YES	1	
		NO	0	→P1201
		DOES NOT KNOW	97	→P1201
		NO RESPONSE	98	→P1201
P1108	In the last 30 days have you used a needle or syringe after someone else has used it to inject medicine or vitamins for medical purposes?	YES	1	
		NO	0	
		DOES NOT KNOW	97	
		NO RESPONSE	98	

P1200	**DO NOT READ QUESTION** **FILTER** **DID THE PARTICIPANT IDENTIFY AS A WOMAN OR TRANSGENDER WOMAN?**	YES 1 NO 0	→P1300

INTERNALIZED HOMONEGATIVITY INVENTORY

No.	Questions	Coding Categories					
READ ALOUD: Now I am going to read some statements about how you may be feeling about your sexual orientation. Please tell me if you Agree or Disagree with the following statements:							
		Strongly Agree	**Somewhat Agree**	**Somewhat Disagree**	**Strongly Disagree**	**DK**	**NR**
P1201	I feel ashamed of my homosexuality.	4	3	2	1	97	98
P1202	When I think of my homosexuality, I feel depressed.	4	3	2	1	97	98
P1203	Sometimes I feel that I might be better off dead than gay.	4	3	2	1	97	98
P1204	I sometimes feel that my homosexuality is embarrassing.	4	3	2	1	97	98
P1205	I am disturbed when people can tell I'm gay.	4	3	2	1	97	98
P1206	I sometimes resent my sexual orientation.	4	3	2	1	97	98
P1207	When people around me talk about homosexuality, I get nervous.	4	3	2	1	97	98
P1208	When I think about my attraction towards men, I feel unhappy.	4	3	2	1	97	98
P1209	Sometimes I get upset when I think about being attracted to men.	4	3	2	1	97	98
P1210	I believe it is unfair that I am attracted to men instead of women.	4	3	2	1	97	98
P1211	I wish I could control my feelings of attraction toward other men.	4	3	2	1	97	98
P1212	I am thankful for my sexual orientation.	4	3	2	1	97	98
P1213	I see my homosexuality as a gift.	4	3	2	1	97	98
P1214	I am proud to be gay.	4	3	2	1	97	98
P1215	I believe being gay is an important part of me.	4	3	2	1	97	98
P1216	I believe that public schools should teach that homosexuality is normal.	4	3	2	1	97	98
P1217	In general, I believe that homosexuality is as fulfilling as heterosexuality.	4	3	2	1	97	98
P1218	I believe that more gay men should be shown in TV shows, movies, and commercials.	4	3	2	1	97	98
P1219	I believe it is morally wrong for men to be attracted to each other.	4	3	2	1	97	98
P1220	In my opinion, homosexuality is harmful to the order of society.	4	3	2	1	97	98
P1221	I believe that it is morally wrong for men to have sex with other men.	4	3	2	1	97	98
P1222	In general, I believe that gay men are more immoral than straight men.	4	3	2	1	97	98
P1223	I believe it is OK for men to be attracted to other men in an emotional way, but it's not OK for them to have sex with each other.	4	3	2	1	97	98

PERCEIVED SOCIAL SUPPORT

No Questions Coding Categories

READ ALOUD: We are interested in knowing more about what type of support you have around you when you get sick. I will read a set of statements and ask if you "Agree" or "Disagree" with the statement.

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	DK	NR
P1301	There is a special person who is around when I am in need.	4	3	2	1	97	98
P1302	There is a special person with whom I can share my joys and sorrows.	4	3	2	1	97	98
P1303	My family really tries to help me.	4	3	2	1	97	98
P1304	I get the emotional help and support I need from my family.	4	3	2	1	97	98
P1305	I have a special person who is a real source of comfort to me.	4	3	2	1	97	98
P1306	My friends really try to help me.	4	3	2	1	97	98
P1307	I can count on my friends when things go wrong.	4	3	2	1	97	98
P1308	I can talk about my problems with my family.	4	3	2	1	97	98
P1309	I have friends with whom I can share my joys and sorrows.	4	3	2	1	97	98
P1310	There is a special person in my life who cares about my feelings.	4	3	2	1	97	98
P1311	My family is willing to help me make decisions.	4	3	2	1	97	98
P1312	I can talk about my problems with my friends.	4	3	2	1	97	98

Male Role Attitudes Scale

No. Questions Coding Categories

READ ALOUD: How strongly do you agree or disagree with the following statements.

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	DK	NR
P1401	It is essential for a guy to get respect from others.	4	3	2	1	97	98
P1402	A man always deserves the respect of his wife and children.	4	3	2	1	97	98
P1403	I admire a guy who is totally sure of himself.	4	3	2	1	97	98
P1404	A guy will lose respect if he talks about his problems.	4	3	2	1	97	98
P1405	A young man should be physically tough, even if he's not big.	4	3	2	1	97	98
P1406	It bothers me when a guy acts like a girl.	4	3	2	1	97	98
P1407	I don't think a husband should have to do housework.	4	3	2	1	97	98
P1408	Men are always ready for sex.	4	3	2	1	97	98
P1409	Seeking help for a health problem is a sign of weakness.	4	3	2	1	97	98
P1410	A man who is sick will lose respect from others.	4	3	2	1	97	98
P1411	Real men don't let others tell them how to take care of themselves.	4	3	2	1	97	98

FOLLOW UP QUESTIONNAIRE

Coupon Number_____ **Date**_____

1. **Is this the first time you have been here to collect compensation?**

   _____ Yes
   _____ No

2. **How many coupons did you give out to your peers?** _____coupons

3. **After your interview how long did you wait before distributing your coupons?**

	Days
Person 1	
Person 2	
Person 3	

4. **Do you think the persons to whom you gave coupons would also have given you a coupon if they had participated in the study before you did?**
   Ask participant to answer about every peer separately.

	Yes	**No**
Person 1		
Person 2		
Person 3		

5. **Do you know the names of the people that received your coupons?**

	Yes	**No**
Person 1		
Person 2		
Person 3		

6. **How many people refused to accept a coupon before you could give them all out?**
   Number of people _____

6. For each person that has not accepted a coupon (P1, P2, P3, etc), ask the following questions

What is the <u>principal reason</u> why these persons did not accept a coupon?					
	P.1	P.2	P.3	P. 4	P. 5
6.1 Very busy/Did not have time					
6.2 Afraid of being identified as gay, homosexual, etc.					
6.3 Incentive is too low					
6.4 The interview site is too far away					
6.5 Not interested					
6.6. Did not have anal sex with a man in the past 12 months					
6.7 Is not MSM.					
6.8 Is under the age of 18 years					
6.9 Already has a coupon					
6.10 Already participated in the study					
6.11 Other (Specify)					

MEASURE Evaluation

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